106 Toolbox Talks

SafetyTalkIdeas.com

Innovative Safety Products LLC
106 Toolbox Talks
Innovative Safety Products, LLC

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Ten Tips to Give a Better Toolbox Talk

Whether or not you are a safety professional you may find yourself tasked with giving a toolbox talk on a frequent basis. For some individuals it is the fear of public speaking that impedes their ability to present a toolbox talk to the best of their ability. For other individuals it is often finding a good topic that creates stress in preparing for a toolbox talk. Use the topics found in this book along with these ten tips to present a better toolbox talk.

1. **Prepare ahead of time.** Know when you have to give a talk and plan for it. Do not go into work the morning you have to present a toolbox talk and scramble to prepare for it. Find a topic well ahead of time and read over it. Think about how you can personalize it for your work or jobsite. The audience can tell when a presenter is not prepared.

2. **Find a relevant topic.** There is nothing worse than sitting through a toolbox talk that has nothing to do with the work that is being performed. Toolbox talks serve the purpose of communicating some type of safety message and if it is not relevant to the audience then you just wasted precious time. Toolbox talks should not be viewed as a go-through-the-motions activity. They have been proven to have a positive effect on a company’s safety culture.

3. **Know your audience.** How you prepare for a toolbox talk to executive level individuals will differ from how you prepare for a daily toolbox talk for your field workers. Use language that your audience understands. Do not try to flaunt intricate words while giving a talk to your field workers if they do not normally use that level of vocabulary for example. Talk with them on their level. It is not a knock on them or their education level in any way. It is just something to be aware of when presenting. Many workers speak English as a second language and if you are using difficult words then your message will not be conveyed.

4. **Do not only read straight from the page/slide.** Do not just print out a safety topic and then read straight from the page word from word like a robot. Use any topic that you print out more as a guideline with pauses to make your own statements or ask the audience for their input or experiences. Reading straight from the page takes away your credibility as the presenter. It is also harder for the audience to want to follow along with the talk.

5. **Be confident.** If you prepared then be confident. There is no reason you do not deserve to be heard for what you have prepared for. As humans many times we are wired to think the worst. Avoid letting your mind wonder about what the audience thinks about you and how they are looking at you. Think about the message you are passing onto the audience. The point of the toolbox talk is to pass useful safety information, not to find out what they think about you.

6. **Make eye contact.** This goes back to confidence. Eye contact goes hand in hand in showing confidence. Avoiding eye contact often leads to more problems with a speaker’s confidence. It
also allows you to connect with audience members. Looking at the audience also gives you visual clues to whether or not you are speaking loud enough or if they understand your message.

7. **Share experiences/stories.** This goes back to not just reading from a page. When you take the time to share a personal experience or story it builds your credibility as well as maintains the audience’s attention.

8. **Allow the audience to participate.** It can get very redundant if you are not creative. Ask the audience for experiences and stories; after all they are the ones who have been in the trenches doing the work. Some people do not like to speak in front of groups, but there is at least a few who do in every group.

9. **Do not be the know-it-all.** Most of the times you do not know everything about a certain topic and that is alright. If you slip up and make a mistake and someone corrects you then recognize it and discuss it if needed. If you do not believe they are right or you are unsure then just state you will have to check on whatever the issue is to be sure. Do not be the guy who insists they are right just to save face. You lose credibility as a speaker and as a person when you don’t recognize your mistakes.

10. **Have fun.** Be flexible and feel free with expressing yourself while presenting. It not only shows you feel comfortable presenting, but it also helps to maintain the audience’s attention. Do not feel that the talks have to be a rigid one way conversation. Experiment with different exercises or techniques and see what fits your company’s needs the best.

**Summary**

These are just ten quick tips that can be useful in preparing for safety talk or toolbox talk. For those of you who have a fear of public speaking, check out Toastmasters International. They are an organization that is dedicated in empowering their members become better public speakers and leaders.
Advice for Using These Toolbox Talks

Most of these talks are between 350 and 500 words. According to speechinminutes.com, these talks should take between 2.5 and 4 minutes to read over. Discussions and questions will obviously extend the time of the talk. Depending on time constraints or expectations you can add or leave out some information to better suit your needs.

Depending on the expectations or needs of your company, these talks may or may not suffice for what you need. These talks are not written for people to just read straight off of the page when presenting the topics. Some of them are formatted in a way this would be completely fine, but others are not. Print the talk out that you want to use then decide if the entire talk adds value to your audience. If not, then highlight the sections you want to cover then dive into site specific information. Use the background info or injury statistics provided then cover company specific policies or safeguards for example. Another example is to discuss an injury that happened onsite then use the best practices or safeguards provided in the talk to add value to the discussion.

Some of the talks on safetytalkideas.com and provided in this e-book are not relevant to the work you do on your site. That being said, you can get value from taking the time to read over them. Not only will you gain some knowledge on a specific topic, you may also be able to connect an idea in that talk to one that is relevant to what you want to speak about.

Please reach out to us using the jeremy@safetytalkideas.com email if you have any questions or comments about the content in this e-book or on www.safetytalkideas.com.
Allergies

Allergies are an issue that many people have to pay attention to every day both on and off the job. There are many sources of allergens that can cause an allergic reaction. Common allergens include pollen, dust mites, food, drugs, latex, animal dander, insect stings, and mold. A few of these allergens may be an issue while on the job. It is important to know what you are allergic to as well as communicating it to others in case of an exposure resulting in an emergency situation. In this safety talk we will discuss two common allergens that could be the source of a severe allergic reaction on the job.

Insect Stings

Insect stings are a common cause of allergic reactions on the job. Most people respond to an insect bite with redness and some minor swelling in the sting area. Some individuals have a much more severe reaction including ones that are life threatening. A life threatening reaction to any allergen, including an insect sting, is called anaphylaxis. Anaphylaxis is a life-threatening whole-body allergic reaction that can impair your breathing, cause a dramatic drop in your blood pressure and affect your heart rate. According to the American Academy of Allergy Asthma and Immunology, there are five insects most likely to cause an allergic reaction in the United States. These five insects are yellow jackets, honey bees, paper wasps, hornets, and fire ants.

The best practice when dealing with these insects is to avoid them whenever possible. If working outdoors survey the work area for any possible nests or areas that could produce these insects. Wear clothing that covers the majority of the skin in case of an attack. It is important to have an EPI Pen that is easily accessible on the job if you are at risk for a severe allergic reaction due to insect stings.

Food Allergies

According to the Allergy and Asthma Foundation of America, people visit the emergency room about 200,000 times each year because of food allergies. Also, almost 10,000 people stay overnight in the hospital each year because of food allergies. There can be many different kinds of food that cause an allergic reaction. Some of the most common food allergies are milk, tree nuts, peanuts, soy, shellfish, fish, and eggs.

The best practice to reduce the chance of an allergic reaction due to food is to know what the allergen is and avoid any food it could possibly be in. Some individuals’ sensitivity is so extreme that if their food is sharing the same refrigerator space as the source of their allergen that they could experience a reaction. It is important that the people around you at work are aware of any food allergy that causes a severe allergic reaction so they can help prevent cross
contamination. Also make sure you have an EPI pen on hand if you experience severe allergic reactions due to food allergies.

Summary

While many employers will not ask for allergy information due to HIPPA regulations, it is important to communicate any allergens to someone on the job who is in a management position. Proper and immediate treatment is crucial for someone suffering from a severe allergic reaction. Anaphylaxis requires immediate medical treatment, including an injection of epinephrine and a trip to a hospital emergency room. If it isn’t treated properly, anaphylaxis can be fatal.
Amputations

Amputations are a very serious health and safety concern in the workplace. OSHA reports there is an average of seven amputations that occur in US workplaces every single day. This reported number has resulted from OSHA requiring employers to report serious injuries starting in 2015. This average does not include 28 states and territories that have their own health and safety programs. The number could be even higher due to employers not knowing about the new reporting rule or those who purposely avoid reporting these types of injuries to OSHA.

More than 90 percent of the amputations involved fingers, but there were also amputations of the hands, toes, feet, and other body parts. There are many hazards in the workplace that can result in amputations.

Common Locations Where Amputations Occur
(source OSHA.gov)

- **Point of operation**- Is where a machine is performing work on a material. Some examples of points of operation include: a razor cutting fabric, a mechanical press bending metal, or a drill bit cutting holes in metal sheeting.
- **Power transmission apparatuses**- This group includes machine components that transmit energy. Some examples include: pulleys, belts, chains, flywheels, cams, gears, and connecting rods.
- **Other machinery parts**- Any machinery part that moves is a hazard that can result in an amputation. This would include any parts that reciprocate, rotate, or traverse moving parts.

Safeguards against Amputations

- **Elimination**- Eliminate any hazards that can cause an amputation injury to avoid the possibility of the injury occurring to any individual. Eliminate work tasks that put individuals in the line of fire for amputation injuries.
- **Engineering controls**- Where there are moving parts ensure there is proper guarding around the hazard. Use barriers or fences to keep individuals out of areas where there is many moving parts or machinery. Use safety devices that shutoff the machine if a person enters a dangerous area. Other safety devices such as ones that will not allow a machine to function unless the operator’s hands are in a safe position can also be effective in preventing amputation injuries.
- **Administrative controls**- Train employees on recognizing the hazards in their workplace that cause amputations. Implement and follow a LOTO program to protect individuals from performing work on live equipment.
• **Personal precautions** - Do not stick your hands where you cannot see them. Do not bypass guards or work on live equipment. Also avoid wearing loose clothing or jewelry that could pull your fingers or other body parts into moving equipment.

**Summary**

Be aware of the different hazards that can cause amputation injuries in the workplace. Focus on eliminating as many of these hazards as possible then look to use effective engineering controls to protect yourself and coworkers from amputation injuries.
Annual Checkup

It is human nature to be reactive instead of being proactive in many aspects of life. Our health is one area where many people do not take steps to improve it until after a problem occurs. This is a reactive approach. It is important to have a proactive approach in protecting your health. Going to your doctor for an annual checkup is an important part of a proactive approach towards maintaining good health.

Why People Don’t Go to the Doctor

- They use the excuse I feel healthy, nothing is wrong
- Money issues or no insurance
- They say they do not have time
- They rather wait until they get sick or hurt

The reasons listed above represent only a few of a large number of reasons why people do not go to the doctors annually. None of the reasons listed above should serve as an excuse to avoid going to the doctor. Time and money especially should not hold us back from going to the doctor. If a small problem develops into a large problem, so will the time and money needed to address it.

Why We Should Go to the Doctors Every Year

There are many benefits of going for an annual checkup. The most obvious benefit is catching problems before they start or very early before they develop into something major. As we get older, it is important to get screened for certain diseases. A few examples of things that could be screened for are skin cancer, breast cancer, cholesterol levels, high blood pressure, and prostate cancer. There are many more ailments and diseases that should be looked at depending on your family history and risk factors.

At the Doctor’s Office

It is important to help the doctor treat you as well as he or she can. It takes effort on your end to make sure they have the information they need. Fill out health questionnaires as accurately and honestly as possible. Have a plan and write down key things you want to talk about with the doctor when you get to the appointment. Be open with the doctor. Do not be shy or embarrassed to talk about any problems or concerns you may have. They need the right information from you to be able to do the best job they can.
Summary

Our health is everything. Without it we have nothing. Everything you do in your life right now depends on your good health. Make it a point to get to the doctor every year, whether you feel good or not. Catching a small problem before it grows into something major may make all the difference between a premature death and living strong for a few more decades.
Attitude

How does attitude affect how your work and safety on the job? What is your attitude today? We all have days where our overall attitude could improve, but how is your attitude towards your coworkers, boss, or safety on a day to day basis? If you are generally a negative person, what effects would a more positive attitude on your life?

Positive Attitude and Health

There are many reasons to strive to have a positive attitude. Outside of the obvious of improving your mood and being more enjoyable to be around, researchers have been studying how a positive attitude can benefit our health. The Mayo Clinic mentions possible benefits such as:

- Increased life span
- Lower rates of depression
- Lower levels of distress
- Greater resistance to the common cold
- Better psychological and physical well-being
- Reduced risk of death from cardiovascular disease
- Better coping skills during hardships and times of stress

Attitude and Safety on the Job

A negative attitude can lead to carelessness, complacency, taking shortcuts, or even serve as a distraction from a work task. A negative attitude towards safety specifically will eventually result in unsafe behaviors. Unsafe behaviors lead to incidents occurring on the job resulting in injury or property damage. Is your overall attitude as it relates to safety negative? If so, why is that?

How to Improve Your Attitude

1. Recognize it. The first step to improve your attitude is to recognize if it is leaning towards the negative side. Ask yourself how your attitude is today and why it is in that state. If it is negative then you need to try to improve it to be a safer, more efficient worker.

2. What is the source of the issue(s)? After you recognize the state of your attitude you need to find the source of your issues that are making your attitude negative. What is bothering you? Is it a coworker? A family situation? Whatever it may be, take note of the sources of your negative attitude.
3. Address the issues. Take the time to address what is having a negative effect on your attitude. For example, if it is an issue with a coworker or boss, have a conversation with them. Most issues can be resolved with a constructive conversation. If the issue cannot be resolved with a conversation with the other person, go to another level of management to resolve it.

4. Remain aware of your attitude. It is important to do a daily self-check regarding your attitude. A good way to do this is to monitor your thoughts or conversations you are having with others. If you are having more negative conversations than positive ones, then it is a good indicator that you need to improve your attitude. It is easy for your attitude to begin to tip towards the negative side as stressors pile back on in your life. There is always going to be issues in your life, but it is important to not let them have a negative effect on your attitude for an extended amount of time.

Discussion point:

-Do you think attitude has a large effect on safety?

-Think of a person you did not enjoy working with. How did it affect your attitude and your work?
Attitude Versus Ability

We have all worked with individuals who have negative attitudes. No one enjoys being around individuals who have negative attitudes. It is often your attitude that determines your success in your career not your abilities.

Importance of Attitude

Outside of just not being enjoyable to be around, individuals with poor attitudes have many negative effects on the workplace they are employed at. Negativity spreads throughout a workplace. When negativity runs rampant in a workplace or even just a portion of it, the effects can be widespread. This kind of negative environment reduces effective communication between employees, motivation levels, and teamwork. These items are critical to success regarding safety and production for a company.

Level of Ability versus Attitude

There is a saying in hiring today that states, “Recruit attitude, train skill”. Many employers today try to evaluate if a job candidate will be successful based more on their attitude than their skills. A study completed by a recruitment group named Reed polled over 1,000 business owners to see what key traits employers look for in job seekers. The findings stated, “It discovered that 96 percent of employers would hire someone who did not have a complete set of skills but displayed the right attitude over an applicant with the perfect skills but who lacked the right mindset. Two thirds of employers said they if had to reduce their workforce they would fire someone with a perfect skills set over someone with deficient skills but sporting the right attitude.” In today’s world employers are realizing the importance of hiring individuals with the right attitude opposed to the perfect set of skills for a job.

Summary

Someone who has all the skills in the world but has a bad attitude will not be as successful as someone with a great attitude and less skills at most companies. Attitude often cannot be taught or easily changed. Skills on the other hand can be taught. Realize that your attitude not only affects your success at your job, but it also has widespread effects on other aspects in your workplace. Workplaces that are full with positive individuals are more likely to have better communication, higher levels of production, and higher morale. Because of this, safety in the workplace also will benefit.
Back Injuries and Prevention

Back injuries are some of the most prevalent and hardest-to-prevent injuries on the job. According to the Bureau of Labor Statistics, more than one million workers suffer back injuries each year, and back injuries account for one of every five workplace injuries or illnesses. These types of injuries account for a large majority of worker’s compensation claims every year.

Back injuries often occur when:

- An individual is lifting up an object
- Using improper lifting techniques such as lifting with the back and not the legs
- Lifting an object that is too heavy for the individual
- Twisting while lifting or carrying objects
- Repetitive lifting during a work task

Ways to Prevent Back Injuries

Eliminate- The best way to protect individuals against back injuries is to eliminate as many lifts as possible during the work day. Using equipment such as forklifts, heavy equipment, dollies, etc. are the best way to achieve eliminating handling and lifting objects by hand. Break down large or heavy objects that pose a hazard when lifting into smaller safer loads when possible.

Engineering Controls- Setup work areas that are ergonomically friendly to all employees. Install mechanical lifting devices and conveyor belts where feasible to limit handling objects. Install proper shelving and setup storage areas that keep objects and lifts within an optimal range. Keeping objects within the proper range helps keep employees from making awkward or dangerous lifts that can result in injury.

Administrative Controls- Use the buddy system when lifting any awkward or heavy objects. Agree on weight limits for lifting. For example, having a policy to not lift anything over 100lbs as a team without first involving a supervisor to see if there is a safer way to complete the lift. Also, always select employees who are physically capable of making the lifts of a task before the work begins.

Personal protective equipment such as back supports or back belts have not shown to be overly effective in preventing back injuries. These devices often create a false sense of security when completing lifts. Individuals should focus on stretching and using proper lifting techniques over using a back belt to keep them safe.
Discussion points:

- Are there hazardous lifts we can eliminate in our daily operations?
- Are we using engineering controls when we cannot eliminate a lift or are we just completing the lifts without looking at a safer way to do them?
Being Observant

There is so much noise and distraction in the world around us. Whether it is at home or at work, we have so much on our minds as well as things going on around us that we miss a lot of important details. It is critical to slow down and be able to observe the environment around you while at work to be able to safely perform tasks.

Being Observant

How many times have you tripped over something you did not see or turn around and get startled because someone was in your area that you were not aware of? It happens to many of us often. Depending on what is preoccupying our mind, our emotions, the distractions around us, the noise levels in our area, etc. will determine how much of our ability to be observant is affected. The less able we are to be observant the higher our chances are to be injured on the job.

How to Be Observant

- Eliminate distractions from your work area. Whether it is someone talking to you or excessive noise try to get rid of anything distracting you from your work. Another way to eliminate distractions is to keep organized work areas to avoid unnecessary distractions.
- Take the time before starting a task to stop and look around your work area. Really focus on the different tools or equipment in that area. Are there hazards you are missing? Do you have everything you need?
- While completing a work task monitor your thoughts. Is your mind truly on the task? For example think of a time when you were driving and can barely remember the trip. How observant do you think you were while operating your vehicle?

Quick Exercise

Get out a regular number two pencil and look at it. If there is not a pencil around look at another basic object such as a cup. Begin to name off observations you have about the pencil or object. If you cannot think of more than 10 characteristics about the pencil or object you can improve on being observant.

Some hints for exercise: Color of pencil, color of tip, is the tip sharp or dull, length, lettering, color of lettering, eraser, eraser size, marks on it, weight, is it straight or bent, does it roll evenly on a table, etc.
Choices at Home and Safety on the Job

There are many choices we make at home that can have major effects at work. Whether it is safety-related or lifestyle choices, many of these choices have repercussions that carry over from home into the workplace.

One Time Poor Choices Affect Work

There are choices you make at home that can lead to safety issues on the job. For example, you go out with your friends to a late Sunday night football game. You choose to go to the bar with your buddies afterwards and drink until 1AM knowing you have to be up at 4AM to go to work. You make it into work on time, but you still are feeling the effects of alcohol and you are very fatigued. You are now putting everyone and the company at a risk for an injury or some type of loss.

Lifestyle Choices and Work

Even choices that seem minor or extremely personal can have a huge effect on a person’s ability to work safe. An example of this is a police officer who has become extremely overweight due to not wanting to maintain his fitness. He is still allowed to have his job and can perform it, but in a much diminished capacity than he used to be able to. His choice to be sedentary outside work can put himself and other fellow officers at risk on the job.

Even choices that are perceived as positive can have a negative effect at work. For example, you choose to take a second job cutting grass during the day when you are off from your night job for extra money. A few weeks into this routine you realize how hard it is to get enough rest before going into your night shift job as a forklift operator. One night at work you start to fall asleep and strike a support beam to a large shelving system. Half of the shelves collapse dropping expensive computer components to the floor below. The company now faces a loss of over $400,000. Sure you may get fired, but how will this affect everyone else at that worksite and the company on a larger scale?

Summary

We do not owe our entire lives to our jobs. We do have freedom to do basically anything we want to outside of work. It is just important to realize how these decisions affect not only yourself at work, but also your fellow coworkers and the company as a whole.
Clothing

An important but often overlooked aspect of safety is the clothing we decide to wear each day on the job. Safety rules, weather, type of work, hazards of the work, and many other factors weigh in on what type of clothing is optimal for the tasks being completed that day.

Weather

Outside of safety rules and regulations, weather is probably the main deciding factor of what clothing someone is going to wear that day. The area where the jobsite is will decide many things about the clothing a person should wear to work. Breathable thinner layers are more desirable in warmer temperatures. In colder temperatures, thicker and warmer clothing will need obviously to be worn to protect workers. In many climates, it may be necessary to wear warmer clothing in the morning and then wear fewer layers in the afternoon. It is important to plan what you are going to wear after considering the weather and how long you will be exposed to it depending what work you are completing that day. Picking clothing that keeps you comfortable as well as protects you from the elements is very important to allow you to fully focus on a work task. Not wearing the proper clothing will take your focus off your work and put it on the fact that you are cold, hot, or wet since you were unprepared for the weather.

Other Important Clothing Considerations

- Make sure clothing fits properly. Loose clothing can interfere being able to complete work safely. It can get caught in rotating equipment or on other objects.
- Do not wear clothing with big tears or holes. Tears or holes can also interfere with work. There have been incidents where a hole in clothing got caught on a control in equipment causing unintended movements which lead to incidents.
- Bring extra clothing to work. Having extra clothes ensures you are able to change if you get a chemical on your clothing or they become wet. Whatever the problem may be it is important to have the option to change. Being comfortable in your clothes allows you to focus on your work.
- Watch strings on hooded sweatshirts when working around rotating equipment or when working on equipment. These can easily get caught up in rotating parts.
- Wear clothing that covers the skin when in areas where poison ivy or insects are a possibility. Covering your skin is the best way to protect yourself from these types of hazards.

Summary

Pay more attention to the clothing you choose to wear to work. Plan for what the weather will be or whatever the environment is if working indoors. Choose types of clothes that will protect
you as well as fit comfortably. Proper clothing will allow you to focus on your work and work more efficiently.

**Discussion point:**

Do you think clothing has a large impact on safety in the workplace?
Communication Tools on a Jobsite

There are many different methods to communicate a message. It is important to recognize the communication tools used on the job that relay important information for your work task and the work environment. Verbal communication is not the only way to send and receive a message.

Forms of Communication

When someone says communication, the first thing you may think about is speaking words to another person or sending an email. These are just two ways to communicate, but there are many more ways found at work. Some other examples of communication include posters, labels, warnings, bulletins, pictograms, JSAs, SOPs, body language, etc. Depending on any number of factors, each of these tools of communication can be very critical to working safe.

Safety Posters- Many hours and a lot of money is spent by companies to develop ideas for posters, implement the ideas behind the poster on the job, and print them out for their jobsites. Safety posters vary greatly in what information they are displaying. While some just have a few words of motivation others can give great detail on a common hazard in the workplace. It is important to pay attention to anything the company or a supervisor puts up on the wall. If it was decided to spend the resources to develop the poster then it is important for employees to review and understand the information it is communicating.

JSAs- Job safety analyses are a proactive tool to prevent incidents, but they are also a method of communication. Much time and thought is spent on developing these tools. If the message that is being conveyed through JSAs is not being read or understood then the tool does not serve any purpose. Often times JSAs can become repetitive for tasks done over and over, but time should always be given to read the message it is conveying. The message is often the same if you are completing the same task, but this is because more often than not it is the same hazards that cause the majority of injuries.

Labels/Warnings- There are labels on just about anything you see in a workplace. All too often labels are not read over or unreadable labels are not replaced. Manufacturers of equipment, tools, and chemicals put these labels on for a reason. Labels communicate some of the most important information for a product including serious hazards, safeguards, and contact information in case of an emergency. Make it a point to review the labels in your work area not only to check to see if they are in good condition but to also understand the message it is stating. If you see a label or symbol you do not understand look in the owner’s manual or ask a supervisor for its meaning.
Summary

These are just a few examples of important tools that convey a message in the workplace. On any given day the most important piece of information you read or take in can be received through any of these tools. It is important to ensure that the message is being received and understood by not only you, but all the workers in that area. Discussion point: How else is safety communicated on the job?
Cost of Drugs on the Job

Individuals who come to work under the influence of drugs and alcohol are a big concern for many employers across the world. In the United States, it is estimated over 60% of employers conduct pre-employment drug screens. The cost of these tests are anywhere from $20 to $60 a piece. Since employers are willing to spend this amount of money on screening employees many find that the benefits outweigh the costs.

Drug Abuse in the United States

A 2013 study published by the National Institute on Drug Abuse found that an estimated 24.6 million Americans aged 12 or older—9.4 percent of the population—had used an illicit drug in the past month. This number is estimated even higher today due to an increase of use of opioids and marijuana. Drug abuse leads to many problems both at home and at work. Depending on the drug, the individual, and the use it can cause many different problems at work in both the production and safety of that job site.

Problems Drug Abuse Causes in the Workplace

1. **Safety** - Individuals under the influence of the drugs are a danger to everyone at the worksite. Drugs impair an individual’s reasoning abilities and motor skills. Drugs can also negatively affect person’s ability to make decisions. Some drugs influence a person to take more risks than they normally would if they were sober.

2. **Production** - Individuals under the influence of drugs are almost always less efficient than when they are sober. Even if the drug is considered a stimulant, there are many side effects or other consequences due to using these drugs. There is more absenteeism by individuals who abuse drugs. Drug abuse often eventually leads to disruptive problems between employees on the job which affects production.

3. **Costs** - There are many costs of drug abuse in the workplace. According to the National Council on Alcoholism and Drug Dependence Inc., the cost of drug abuse is over $81 billion annually in the United States. When a company has to spend a significant amount of money randomly drug testing employees, dealing with the consequences of lost production, and safety incidents, there is less money for the other areas of the business. Upgrades to equipment, better benefits, bonuses, and pay raises can all be negatively affected by drug abuse in the workplace.

Summary

Drug abuse in the workplace is an issue for everyone involved in the company. Not only is it a safety issue for those individuals around someone who is abusing drugs, but there are other consequences. When production is slowed down and costs go up, less money is available for
other areas of the business. Speak up to a supervisor if you see a coworker who may be having issues with drugs.
Defensive Driving

The roads can be an extremely dangerous place. According to the National Highway Traffic Safety Administration, there were an estimated 6.3 million police-reported car accidents in the United States in 2015. Distracted drivers, speeding, and drivers under the influence caused or contributed to the majority of accidents each year. Drivers need to be cautious and aware of the other drivers while on the road. Being a defensive driver is the best way to protect yourself while on the road.

Most collisions that occur today are preventable. With all of the reckless drivers on the road today, it is more important than ever to be a defensive driver. The National Safety Council defines defensive driving as, “Driving to save lives, time, and money in spite of the conditions around you and the actions of others”. Defensive driving techniques involve more than just following the basic traffic laws.

Defensive drivers:

- Leave themselves an “out” when driving. Defensive drivers always think about their next move if a crash were to occur.
- Slow down when the conditions warrant the need to.
- Do not engage in road rage activities.
- Avoid collisions by all means necessary- within the limits of the law.
- Plan their travels before leaving for their destination.
- Recognize the risks of their surroundings while driving.

Defensive Driving Example

John has been seeing a lot of deer activity in the roadway on his normal way home from work. Instead of going the normal way John decides to take a route where there is less deer activity on to the road. On his way home it begins to rain heavily and the roadway becomes slick so he slows down to 5 MPH below the speed limit. After a few minutes of driving at this speed, the driver behind him begins to flash his lights and tailgate his vehicle. Instead of speeding up or stepping on the brakes, John decides to pull over where it is safe to do so to let the other driver pass.

Discussion points:

-What were some of the defensive driving techniques that John used?

-How can we use defensive driving techniques here at work or on our commute to and from work to stay safe?
Diet

The saying “you are what you eat” may be a little dramatic, but what you choose to eat can have a major effect on your health and how you feel. How you feel at work will have a major effect on being able to and choosing to work safely. It is important to make sure the things you choose to eat and drink are helping improve your health and not hurt it.

Diet and Disease

Diet has a big effect on your overall health. Diet has been linked to many different health issues including many diseases and cancer. Heart disease is the number one cause of death in the United States and is closely linked with diet. A proper diet reduces the chances of conditions such as high cholesterol, high blood pressure, and obesity which are all factors in whether a person has heart disease or not. Heart disease and other ailments like it have a major effect on you day in and day out. Whether it is the actual disease or medications you need to take to combat it, you will not be able to feel 100% well every day.

Diet and Mood

Most people are aware that diet affects our weight and ultimately our health, but many people may not realize there can be a link between diet and mood. For example, research has been done that shows a link between vitamin D deficiency and depression. The sun is a major source of vitamin D for us, but we also get it from our diet. If you are not getting enough vitamin D it may be the source of a down mood.

Another example is research that has linked a low carbohydrate diet and lack of energy. Participants in the study done by Arizona State University showed higher levels of fatigue and a lack of desire to exercise just two weeks into beginning a low carb diet. While you may not have these issues, it is important to know that diet could be the source or trigger of a change in mood.

Diet and Safety

If you are not feeling good you cannot work to the best of your ability. Whether it is health issues or lack of energy, your diet plays a big part in safety at work. If your focus is not on the task or you do not have the energy to take the extra steps to ensure the task is being performed safely, you are putting yourself and others at risk. Take a moment to reflect on your diet and how it affects your work.

Discussion point:

-Can you think of ways to improve your diet?
Distracted Driving (Cellphone Use)

Using cellphones or other devices while driving has proven to be deadly. Cellphone use during driving is very prevalent on our roads today. In fact, at any given time throughout the day, approximately 660,000 drivers are attempting to use their phones while behind the wheel of an automobile.

Smartphones have made it easy for us to stay connected at all times. But that can pose serious safety risks if someone decides to check his or her text messages, emails, phone calls, or any other mobile applications while driving.

Statistics on Cell Phone Use and Driving

- The National Safety Council reports that cell phone use while driving leads to 1.6 million crashes each year.
- In 2013, 3,154 people were killed in distraction-related crashes.
- Nearly 330,000 injuries occur each year from accidents caused by texting while driving. 1 out of every 4 car accidents in the United States is caused by texting and driving.
- Texting while driving is 6x more likely to cause an accident than driving drunk.
- Answering a text takes away your attention for about five seconds. Traveling at 55 mph, that’s enough time to travel the length of a football field.
- Texting while driving causes a 400% increase in time spent with eyes off the road.
- Of all cell phone related tasks, texting is by far the most dangerous activity.

Best Practices

- Put the cell phone down while driving.
- If you need to text or call while driving pull over to safe area to do so.
- When traveling as a passenger, urge any driver who is using their cellphone to put it down.
- If there is another driver on the road who is using a phone while driving, maintain a safe distance from them and be a defensive driver. Always leave yourself an out in case of any type of accident occurs around your vehicle.

Discussion point:

-How often do you see others texting and driving on the road?
Distractions

There are many distractions present in the world around us. There are so many things going on at once in our environment that our brain actually limits what we respond to or recognize. Think about being in a loud crowded restaurant. Many other people are having conversations around you but you do not really hear what they are saying. However, if someone says your name your attention will snap to that conversation and you will now pay attention to what they are saying. This is an example of how our minds pick and choose what we actually take in from all of the distractions and things going on in the world around us. At work, it is important to limit distractions so it is easier to pay attention to what needs accomplished.

Stressors at Home

Distractions do not even have to be in the immediate work area to negatively impact your work. For example, stressors at home can be a major distraction for us while we are at work. Relationships, illnesses, finances, etc. are common pain points that distract an employee from their work.

Distractions at Work

There is an endless amount of distractions in the work environment that could be affecting your ability to focus and execute work tasks. Some common examples of distractions in the workplace:

- Noise can be a real issue in disruption of communication as well as distracting individuals from the work going on at hand.
- Clutter and poor housekeeping can affect work performance. A study done by the Princeton University Neuroscience Institute found that physical clutter makes it harder for an individual to focus as well as for the brain to process new information.
- Other work tasks going on. Many workplaces have multiple work tasks going on at one time. These other tasks going on around us can make it hard for us to focus on the work task we are completing.

Best Practices in Eliminating Distractions

Evaluate your work area and the task you are doing to see what is distracting you from your task. Is it stressors at home, something else on your mind, or is it something present in your actual work environment? Once you recognize the distraction what can you do to eliminate it? If it is a stressor at home can you make a phone call and attempt to get peace of mind? Talk with a friend or family member about the situation that is bothering you to try to calm your mind about it.
For the distractions in your work area, the fix may be more difficult to solve depending on what the source is. Fix any issues that you can for the work area you are in such as picking up clutter or organizing tools. For larger or more complex distractions work with a supervisor or safety representative to get the issue resolved. Often times, preplanning or adjusting a work area can eliminate the majority of distractions an employee is dealing with.

**Discussion points:**

-What are some distractions in our workplace?

-How can we solve these distractions?
Does Safety Really Take Extra Time?

There are many complaints someone can have about workplace safety. One major complaint or excuse for not following safety policies or procedures is time. At the company or management level, time is equated to money. At the individual worker level, someone may just not want to take the extra time it may take to work safely. While individuals who do not follow safety procedures to save time may get lucky and not have an incident, when one does occur much time and money will have to be spent to address the issue.

Safety and Time

Yes some safe work practices take extra time to implement. On the other hand many do not take much time at all. Regardless of the time spent to put these safeguards into place or follow a certain safe work practice, they are meant to be followed for a reason. Safety rules and policies have been implemented over time due to many different reasons. These reasons may include federal regulations, lessons learned, past injuries, near misses that have occurred, etc. Regardless of why the policy or practice is in place, they all have one thing in common- they were originally created in order to prevent injuries, illnesses, and property loss incidents. While it may cost more time or money up front to implement required safeguards, it will often save time and money on the back end through preventing injuries and illnesses.

Costs of a Workplace Incident

There are both obvious direct costs and hidden costs when an incident or injury occurs on the job. Direct costs include the medical treatment needed to treat the injury. The direct costs are always less costly than the accompanying indirect costs. Some estimates state that every dollar spent on the direct costs of an incident equals four to ten dollars in indirect costs. These indirect costs created by an injury or illness are usually not recognized at first glance. The National Safety Council lists examples of indirect or uninsured costs:

- Lost production time.
- Productive time lost by an injured employee.
- Productive time lost by employees and supervisors helping the accident victim.
- Cleanup and startup of operations interrupted by an accident.
- Time to hire or train a worker to replace the injured worker until they return to work.
- Property damage. Time and cost for repair or replacement of damaged equipment, materials, or other property.
- Cost of continuing all or part of the employee’s wages, plus compensation.
- Reduced morale among employees, and perhaps lower efficiency.
- Cost of the time to complete paperwork generated by the accident.
• OSHA penalties.

Summary

There are even unmeasurable costs associated with a company having injuries. These can include the reputation of the company or talented workers not wanting to apply for jobs at that company. While it may take extra time to follow safety rules or procedures, doing not only save time in the long run, but also avoid many other issues created by incidents. It is sometimes difficult to evaluate the benefits working safely creates over time. Realize that the costs are much greater when an injury occurs than they are when safe work practices are being followed and these incidents are reduced.
Dropped Objects

Objects and tools dropped from higher levels is a serious hazard on the worksite. According to the Bureau of Labor Statistics, in 2011 there were 219 fatalities from being struck by a falling object or equipment in the United States. Objects as small as a bolt can cause serious injury or even death when dropped from a higher level. Outside of injuries and deaths, dropped objects are responsible for a large cost to employers due to property damage incidents.

Actions to Prevent Dropped Objects

Eliminate the hazard- Remove objects and tools from higher levels, scaffolding, or aerial lifts that do not need to be there. Removing objects that can pose a hazard to people working below is the best option to prevent a dropped object incident.

Engineering controls- Barricade zones below higher work levels to prevent personnel from walking into the line of fire of a dropped object. Install toe boards on higher work levels to make sure objects and tools cannot easily slide off an edge to a lower level. Place nets or some type of protective barrier above ground level workers if there is continuous work being performed above a work area. Another engineering control is the use of tethers or anchors for tools and objects that are being used on a higher work level. This limits the object from falling.

PPE- Anytime there are overhead hazards present on a jobsite hardhats need to be worn. PPE is always a last line of defense. Wearing a hardhat will only limit the damage a dropped object does, not prevent it from happening. Rely on eliminating the hazard or installing engineering controls to reduce the chance of objects striking ground personnel not PPE.

Look at all work areas where a dropped object incident can happen. Situations such as using aerial lifts and working on scaffolds pose obvious hazards, but try to identify less obvious hazards. An example could be a large wrench sitting on the edge of a piece of equipment that has a mechanic working underneath in the line of fire. Paying attention to the smaller hazards translates to larger changes in the safety of your work site.

Discussion points:

- How can we prevent dropped object incidents on our site?

- When working in your job area today, look for hazards associated with dropped objects and report them to your supervisor or the safety department to get corrected.
Drowsy Driving

There are many hazards we face today anytime we operate a motor vehicle. Weather, poor road conditions, and wildlife are some common hazards on the road today. There are also many hazards created by other drivers on the road. One very deadly activity that is taking place far too often on our roads is drowsy driving.

Drowsy Driving in the United States

In today’s world we are busier than our parent’s or grandparent’s generations have ever faced. Between work, kids, house work, school, and any other obligations we have, there is more fatigue and drowsiness in the general population than arguably ever before. Because of this fact of our fast-paced lives, drowsy driving is a major concern on our roadways. The National Highway Transportation Safety Administration reported that drowsy driving claimed 846 lives in 2014. Additionally, an estimated 37,000 injury crashes and an estimated 45,000 property damage only crashes occur annually related to drowsy driving. While general fatigue is a major cause of drowsy driving there are also several other causes.

Causes for Drowsy Driving

- Lack of sleep- The amount of things we have going on in our lives can make it hard to get plenty of sleep. A Gallup Poll done in 2013 reported that 40% of Americans get less than 7 hours of sleep.
- Medical issues- Certain medical issues or health conditions can bring the onset of drowsiness even if a person has had plenty of sleep. One common example is thyroid issues.
- Drugs/ alcohol- Drugs and alcohol on their own can cause an obvious hazard while driving. When they are paired with a lack of sleep or medical issues, it can be an extremely dangerous situation.

How to Avoid Drowsy Driving

- Get plenty of sleep. Most experts recommend at least 7 hours of sleep.
- Eat a good diet and drink plenty of water. Taking care of your body is important to function at optimal levels.
- Consult your doctor for an unusual or excessive fatigue. It could be a symptom of an underlying health issue.
- Never drink and drive. Use caution even when only using prescribed medication. Many medications cause drowsiness.
• Pull over when fatigue or drowsiness is setting in. A ten minute nap can make the difference in whether or not you make it to your destination.

Summary

Do not be a drowsy driver. Take the necessary precautions to avoid putting yourself in a dangerous situation. Pay attention to the drivers around you and practice defensive driving techniques to protect yourself from other drivers who may be driving drowsy.
Drug Abuse

Drug abuse is a major problem both in the United States and around the world. A 2013 study published by the National Institute on Drug Abuse found that an estimated 24.6 million Americans aged 12 or older—9.4 percent of the population—had used an illicit drug in the past month. This number is estimated even higher today due to an increase of use of opioids and marijuana. Drugs can cause many different problems at work in regards to production and safety depending on the kind of drug, the individual, and the level of abuse.

The Cost of Drug Abuse for Employers

Drug abuse is costly for the employers of the United States. It is estimated by the National Council on Alcoholism and Drug Dependence Inc., the costs of drug abuse is over $81 billion annually. Much money is spent on drug testing in attempt to hire sober individuals up front and to discourage drug use while employed. Employers spend money of these drug tests in an attempt to prevent costly absenteeism, loss of production, and injuries. Despite the drug testing by employers, NCADD estimates that 70% of the estimated 14.8 million Americans who use illegal drugs are employed. It is important to everyone’s safety and the company’s bottom line that every worker does not use illegal drugs both on and off the job.

Effects of Drugs at Work

Drugs affect an individual’s ability to reason, motor skills, and decision-making abilities. Depending on the drug a user may also be more inclined to take risks. Individuals can also experience an altered mood or aggression towards other coworkers. Due to the impairment that drugs can have on a person, it is important to report any odd or suspicious behavior to a supervisor. The supervisor will work with HR or another higher level of management to monitor the individual and take further steps if needed.

Common Signs of Drug Use in the Workplace
(source: NCADD.org)

- Tardiness/sleeping on the job
- After-effects of substance use (hangover, withdrawal)
- Lower job performance
- Poor decision making
- Loss of efficiency
- Theft
- Having trouble with co-workers/supervisors or tasks
- Loss of focus
Summary

Drug abuse is common in the United States, but drug use needs to stay out of the workplace. When an individual comes to work under the influence of drugs it is a huge safety concern for everyone on that jobsite. Also when companies lose a lot of money due to the indirect and direct costs of drug abuse in the workplace it hurts everyone in the company. Upgrades to equipment, pay raises, bonuses, and better benefits could be out of the question at some companies due to drug abuse. Speak up when you think one of your coworkers is suffering from a drug abuse problem.
Drunk Driving

Accidents resulting from drunk driving occur every single day in the United States, causing an average of 28 deaths. According to the National Highway Safety Transportation Administration, there were 9,967 deaths in 2014. People drive drunk an average of over 300,000 times a day in the United States, but fewer than 4,000 are arrested for it according to the FBI. When you are involved in an accident, it affects more than just yourself. It will affect your family emotionally as well as financially, and if there is another people involved, their families as well.

Cost of a DUI

Outside of the injuries and deaths resulting from crashes, getting arrested and charged for drunk driving is expensive. The average cost for a person’s first DUI conviction is anywhere from $9,000 to $24,000. A DUI can also cost you your job or make it difficult for you to find a new job. Many employers will not hire someone with a recent DUI or will fire someone who has got one while working for them. Many employers require employees to be able to drive a company vehicle and maintain a clean driving record. A DUI is virtually an instant way to lose your ability to drive a company vehicle. If driving a vehicle is a requirement for your job and you cannot perform that function you will be let go.

Avoid a DUI

The best way to avoid getting a DUI is to avoid drinking and driving entirely. If you are planning on having a few drinks while you are out, make sure you have a ride beforehand. Do not put yourself in a situation where you feel that your only option is to drive home drunk. If you are at a friend or relative’s house consider staying the night instead of driving. If staying the night where you are at is not an option, find a ride home. Call family, friends, a taxi, or Uber to get you home safely.

Summary

There is never such a thing as “just a drive down the street” when you are drunk. It may seem like an easier and quicker option compared to finding a designated driver, but it is a decision that could change your life or someone else’s life forever. Think before you decide to drive drunk.

Discussion points:

-Does anyone have any stories of someone they know who drank and drove and has been involved in a crash or was arrested? How did it affect their life?
Dump Truck Operation

Articulating dump trucks or just regular dump trucks are found on almost every single construction site and many other kinds of work sites. While the task of getting loaded, hauling material, dumping the material, and repeating sounds simple, there are a lot of associated hazards with the operation of this equipment. It is important not to be complacent as the operator of this equipment or as the ground personnel working around this equipment.

Injuries and Incidents Associated with Dump Truck Operation

- Back over incidents of people or other equipment. OSHA states that dump trucks followed by semi-trucks and ordinary pickups are responsible for the majority of back over incidents in the past 10 years on the job.
- Tip over of entire truck or the bed of an articulating dump truck. Tip overs can cause serious injury to both the operator or ground personnel.
- Property damage incidents. Due to the sizes of these trucks and lack of room of some job sites, there is a lot of money lost due to property damage incidents.
- Contact with electrical lines.
- Slips, trips, and falls. Climbing on and off of the equipment multiple times a day puts an operator at risk for falling while getting in and out of the cab.

Best Practices When Operating and Working Around Dump Trucks

- Avoid backing up whenever possible. Many incidents result from unnecessary backing up. Set up work areas so that operators are able to pull through instead of backing.
- Use a spotter when it is necessary and safe to do so. Spotters need to stay out of blind spots as well as away from the truck in case of tip over.
- Always dump on flat even ground. After the load is dumped pull up just enough to clear the load and put the bed down before driving off. Leaving the bed up while driving can result in contact with electrical lines as well as tip over.
- Always inspect your truck thoroughly before the start of the shift.
- Always wear your seatbelt.
- Complete inspections of work areas to look for any hazards that can create for unsafe conditions for operation.
- Complete a walk around of your truck any time before you get back into the cab. Check around the truck to ensure no person, vehicles, or materials are in your blind spots.
Human Performance Considerations

It is very easy to become complacent when operating this equipment. Maintain focus while in operation of a dump truck. Stop work if you do not feel trained or comfortable with the task at hand. Not all haul roads and tasks are created equal when it comes to operating dump trucks. Take breaks when needed and get out to stretch if fatigue or boredom sets in. The consequences of not paying attention behind the wheel are serious.

Discussion point:

- What other hazards are there when it comes to this equipment?
Dust (Construction Industry)

There are many different hazards on any single construction site. Dust can be one of them. Dust can cause a variety of issues from health concerns to physical hazards for workers who are exposed to it. It is important to understand the issues dust cause can and what steps that should be taken to prevent it onsite.

Dust Health Hazards

According to a study published by WHO, “Airborne dusts are of particular concern because they are associated with classical widespread occupational lung diseases, as well as with systemic intoxications such as lead poisoning, especially at higher levels of exposure. There is also increasing interest in other dust-related diseases, such as cancer, asthma, allergic alveolitis and irritation, as well as a whole range of non-respiratory illnesses, which may occur at much lower exposure levels.” Dust that contains crystalline silica is also a huge issue for workers on construction sites. Crystalline silica respirable dust particles can penetrate deep into the lungs and cause disabling and sometimes fatal lung diseases, including silicosis and lung cancer, as well as kidney disease. It is never good to breathe in any excessive amount of dust even if it is thought that no contaminants are present in the dust.

Other Dust Hazards

Outside of health concerns that dust can create there are also other hazards it is responsible for. A few of these hazards include:

- Injuries to the eyes
- Dust can serve as a distraction from a work task creating more risk for injury or property damage
- Decreased visibility

Best Practices to Avoid Dust Related Illnesses and Injuries

- Eliminate the source of the dust whether that is through engineering controls or a change in work processes.
- Use collection or vacuum systems on tools that create dust to collect it at the point of operation.
- Use wet methods when cutting or breaking any concrete or similar materials.
- Use water as a means of suppression for the dust on roadways or in work areas.
- Have trucks and equipment keep speeds down if dusty conditions are present onsite.
- Stay out of areas where dust levels are high as well as avoiding being downwind from these areas.
• Use proper respirators when engineering controls are not enough to protect you.

Summary

Consider the hazards dust creates onsite. Realize the health issues it can create as well as the physical hazards. Elimination is the best way to protect yourself from dust or any other hazard onsite for that matter.

Discussion point:

-How can we reduce our exposure to dust at this worksite?
Eating Habits

The well-being of our bodies is everything to us. If we do not take care of our health at some point our bodies will develop problems. Without our health we are not able to fulfill our daily tasks. Eating well should be a major goal for you to maintain good health throughout life.

Our bodies work like machines and are only able to withstand so much abuse. Food is the equivalent of fuel to our bodies. If you are consistently putting bad fuel in a machine it will breakdown, the same goes for our bodies. Diet has been directly linked to many different aspects of our health. It is impossible to list every situation here, but we will discuss some of the major problems caused by eating poorly.

Health Problems Caused by Poor Eating Habits

- Heart disease
- Obesity
- Diabetes
- Some types of cancer

There are also smaller issues that a poor diet causes that can affect you on a daily basis. Fatigue and lack of focus can sometimes be attributed to eating poorly. Being fatigued can have major effects on performing your job safely. When you are not feeling 100% you are putting yourself and others around you at risk. Eat healthy to benefit yourself and family first, but also think of the positive effects it can have on your work.

Quick Tips to a Better Diet

*Consult a doctor or nutritionist before any major diet changes.*

- Drink more water. Water serves many important purposes for our bodies. Most Americans do not drink enough water each day and are not aware of it.
- Limit food with processed sugar. Sodas, candy, sweets, and other junk food are filled with processed sugar. These foods can lead to obesity and diabetes.
- Eat more fiber. Fiber has proven to help fight off some cancers. It also limits the amount of calories your body will absorb.
- Choose whole grain foods. Whole grain foods contain many nutrients and like fiber, it can help you maintain regular bowel movements.
- Take a multivitamin. Multivitamins can help you get essential vitamins and nutrients you may not be getting in your diet.
Discussion points:

- Do you believe your diet has an effect on your work?

- Did you know that drinking one can of soda a day adds up to over 50lbs of sugar in a year?  
  (Source: NYC Health Dept)
**Electrical Injuries**

The hazards associated with electricity affect the majority of workplaces. Whether you are in general industry, construction, or even farming electrical hazards are present. It is important to be able to recognize the electrical hazards around you.

**Electricity-Related Injuries**

According to the Electrical Safety Foundation International, between 1992 and 2010 there were 5,096 fatalities in the United States due to contact with electricity. There were a total of 66,748 injuries that required days away from work in the same time period due to electricity. The construction industry experiences the majority of injuries and fatalities. In these statistics they do not include injuries caused by secondary events. For example, an individual falling from a ladder and sustaining injuries due to getting shocked. If these types of injuries were included the statistics would be higher. Everyday individuals suffer some type of shock, but do not seek or require treatment for their injuries. Because of this, it is difficult to fully track the occurrence of electrical shock in the workplace.

**Common Electrical Hazards**

- Energized overhead powerlines
- Lightning
- Faulty equipment
- Working on energized equipment
- Improper grounding
- Damaged insulation

**Electrical Shock**

Electrical shock occurs when a person becomes part of an electrical circuit and the current passes through their body. A person becomes part of a circuit when they are in contact with an electrical current and a ground or an electrical current and another electrical current with a different voltage. Three primary factors affect the severity of the shock a person receives when he or she is a part of an electrical circuit:

- Amount of current flowing through the body (measured in amperes).
- Path of the current through the body.
- Length of time the body is in the circuit.

There are also secondary factors such as presence of moisture, state of the heart of the individual, and state of health of the individual that can affect the severity of the shock.
Summary

There are many ways to be injured or killed by electricity both at home and on the job. This talk only discussed the injury statistics, common electrical hazards, and how electrical shock occurs. It is important to understand how to mitigate electrical hazards. Discuss the electrical hazards and the mitigation actions for these hazards in your workplace with your supervisor or health and safety manager.

Discussion points:

-What are some electrical hazards present onsite?

-What are ways we can protect ourselves from electrical-related injuries?
Electrical Safety

The hazards associated with electricity affect the majority of workplaces. Whether you are in general industry, construction, or even farming electrical hazards are present. It is important to be able to recognize the electrical hazards around you and know how to mitigate them.

Electricity-Related Injuries

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Common Electrical Hazards

- Overhead powerlines
- Underground powerlines
- Lightning
- Faulty equipment
- Working on energized equipment
- Improper grounding
- Damaged insulation

Electrical Safety

- Maintain at least a 10 foot distance from 50kV overhead powerlines, add more distance as the voltage increases. Also avoid the poles themselves to avoid bringing lines to the ground.
- Call your local 811 utility locator prior to digging to avoid unexpectedly striking an underground electrical line or any other utility.
- Inspect all cords for damaged insulation or missing ground prongs. If either of these conditions exist get them fixed by a professional or remove them from use.
- Never work on energized equipment. Always follow proper lock and tag out procedures before performing electrical work. Test the power after locking and tagging out to ensure there is no power being fed to what you are working on.
• Do not operate electrical equipment in wet conditions. Also avoid having electrical components in a wet environment unless they are protected.
• Secure all electrical boxes and panels. Ensure components in and around these panels are in good working condition and not missing.

Summary

There are many different electrical hazards in any one workplace. It is important to understand and respect the dangers electricity poses. Eliminate any electrical hazards in your work area to avoid an injury to yourself or another coworker.

Discussion point:

- What are some electrical hazards you can face today and how can you mitigate them to protect yourself?
Elimination of Hazards

When discussing how to mitigate hazards in the workplace there is a hierarchy of controls that is often referred to. The safeguards we use to control hazards fall into the various levels on the hierarchy of controls. The hierarchy of controls outlines the safeguards used to mitigate a hazard from most effective to least effective. The hierarchy can have additional or less levels of controls listed depending on the version you are looking at. A common version of the hierarchy from most effective to least effective control is listed as: elimination, substitution, engineering controls, administrative controls, and PPE. Elimination should always be considered first when attempting to mitigate hazards in the workplace.

Relying on Lower Levels of Controls

If we do not first attempt to eliminate or use effective engineering controls to protect ourselves against hazards, we have to resort to using some type of PPE or another less effective safeguard. This is not an effective way to prevent injuries and accidents. Safeguards that would fall under the PPE level of the hierarchy of controls are far less effective than safeguards that eliminate or engineer out hazards. An example would be relying on a pair of gloves to protect your fingers from a pinch point hazard instead of ensuring there is proper guarding around the pinch point. PPE should always be considered the last line of defense and employees should have this mindset as well.

Elimination

Elimination of hazards is the most effective way to protect employees against injuries. However, far too often companies or individual employees do not take the time to plan out work tasks or the time to actually eliminate the hazards they are faced with. Everyday millions of workers are faced with hazards that they do not need to be exposed to. Proper planning of work, thinking about alternative safer ways to complete a work task, and allocating the necessary resources to complete the task are some of the first steps supervisors can take to begin to eliminate hazards. At the worker level, hazard recognition and the elimination mindset is important to ensure any additional hazards are eliminated.

Quick Examples of Eliminating Hazards

1. John Smith sees a hammer hanging half way off of a piece of equipment that is being worked on and tells the mechanic it is up there. Instead of just not trying to knock the hammer off the elevated surface the mechanic decides to remove it and put it back on the tool bench. This ensures he or anyone else will not be struck by it falling.
2. Two cooks have cut their fingers while sharpening knives at XYZ Restaurant. The manager of the restaurant decided to make a new policy that knife sharpening is
completed by a third party company and not by the cooks in the restaurant. The sharpeners are removed from the restaurant and the cooks are trained on the new policy.

3. ACME Construction Company is excavating and moving excessive dirt for a footer of a large warehouse. Due to excessive rain, the site conditions make it very dangerous for dump trucks to operate. The superintendent decides to shut down dump trucks for the day and have only the dozer operators to come in to dress up the site.

Discussion points:

- Are there hazards that we are relying on PPE or a lower level control to mitigate the hazard instead of eliminating it completely?

- Is there any other example of eliminating hazards that you can think of?
Embracing Change in the Workplace

Change can be good or bad, depending on what the change is and more importantly, how you react to it. Change is a fact of life that is inevitable and we all need to deal with it as best we can. Individuals who adapt and embrace the change are the ones who continue to thrive; whether that is at home or in the workplace.

Change in the Workplace

For those of you (us) who have been in the same line of work for many years, you have seen a lot of changes. With ever improving technologies and accessibility of information through the internet, mankind is moving at incredible speeds. Whether it is the use of computers, improved technologies, law changes, schedule changes, shifts in business, and even the use of robots—there have been drastic changes in the majority of workplaces over the last few decades.

Change in the Emphasis of Safety in the Workplace

An increased focus on safety is an example of change over the last few decades for the majority of workplaces. While everyone benefits from companies wanting to avoid injuries, some individuals harp on the fact that “back in the day” there was no safety and a lot more progress got done at work. While this is maybe true in some cases, the recent shift for focusing on safety rewards companies that care for their employees. This not only keeps the workers healthy, but also makes good business sense for the company. A negative attitude towards the change of increased emphasis on safety not only can lower morale of fellow coworkers, but it actually hurts not helps the overall goals of the business. With all this change how will you adapt?

Embracing and Adapting Change in the Workplace

Mentioned above, your success and happiness relating to changes in the workplace will directly depend on how you adapt to it. There are always individuals who talk about the “old way” of doing things or how things were done “back in the day”. While this experience is irreplaceable and will always hold value, it will only do soon if you continue to adapt to the new technologies and the new ways of doing things. Individuals who are stuck in the past and doing things the old way will be left in the dust of change. If the same individuals used this critical experience and life lessons and applied it to the new changes in the workplace they will continue to be valuable employees. Stay ahead of the new trends to figure out how you can apply what you have learned to the new paths of your career field or the job market as a whole.

Summary

We cannot fight or slowdown change. Everyday more and more news stories are published about major businesses closing their doors for good such as Sears recently announced.
Companies must embrace change to continue operations and their employees must not only accept change, but think of how they can add value to the change on an individual level to continue to thrive themselves.
Energy Drink Dangers

Caffeine is commonly used in today’s society to get more energy or to feel more alert. While coffee has been around for hundreds of years and is still the most common caffeinated drink in the world, energy drinks have been gaining in popularity over the past few decades.

Energy Drink Background

The first energy drink was created in 1927 to serve as an energy source for cold and flu patients. The drink was called Lucozade and the 1983 version of the drink only had 46mg of caffeine in it. The modern energy drink we are used to today was not created until 1987 when Redbull was born from a similar energy drink found in Thailand. Redbull was first introduced into the United States in 1997 and energy drink consumption has been increasing ever since.

Energy Drink Hazards

Overconsumption of caffeine and other energy producing ingredients found in energy drinks such as taurine can lead to health issues. In a study published by the Substance Abuse and Mental Health Services Administration, emergency room visits due to energy drinks doubled from 10,000 visits in 2007 to over 20,000 visits in 2011. 58% of the visits resulted from energy drinks only and the other 42% were with a combination of another drug such as prescription pills or alcohol. Another study focused on cases that involved heart abnormalities like irregular heartbeat, while some documented neurological problems like seizures. According to the researcher, “Animal studies have shown that caffeine and taurine, both common energy drink ingredients, intensify each other’s effects. That may cause calcium to build up in the heart cells, which can cause those vessels to constrict.”

Common Energy Drink Caffeine Amounts

Many experts believe daily caffeine consumption is perfectly fine for healthy adults. The Mayo Clinic states that up to 400mg a day of caffeine appears safe for most individuals. Energy drink caffeine levels very greatly and consumers must also take into account the additive effect of other ingredients such as taurine. Some common energy drinks and their caffeine amounts:

- Redbull 12oz- 111mg
- Monster 16oz- 160mg
- Rockstar 16oz- 160mg

Other Considerations Before Drinking Energy Drinks

While the levels of the above energy drinks are well under the 400mg mark, there are other considerations you must take into account.
• Know the content of caffeine from other sources such as coffee or soda that you may be drinking during the day.
• Know your limit when it comes to caffeine. Some people are more sensitive to it than others.
• Consider what kind of work you will be doing. Intense labor work can already been putting a strain on your heart and body before adding in an energy drink.
• Consider your working environment. Drinking energy drinks before working in a hot or stressful working environment may not be the best choice.

Summary

Be aware of what you are putting into your body. While all experts do not condemn drinking energy drinks, most recommend consuming no more than one per day. Energy drinks can have negative side effects and put you more at risk for heart troubles especially for those working intense labor jobs or in stressful work environments.

Discussion point:

-Does anyone know someone who has had issues with energy drinks?
Eye Injuries and Prevention

Our eyes are one of our greatest assets. They give us the ability to see the world around us. If we do not protect our eyes from injuries while at work we could easily lose that ability. There are an estimated 2,000 eye injuries every single day on the job according to the CDC. These incidents cost employers over $300 million dollars per year. It is important to eliminate or engineer out the hazards that could pose hazards to our eyes at work. Most of the hazards to our eyes on a worksite cannot be fully eliminated so proper eye protection is also critical.

Eye Hazards

- Flying dust
- Flying debris
- Chemicals
- Blunt trauma to the eye
- Burns due to UV exposure, such as welder’s flash

Eye Safety Tips

- Identify all of the potential eye hazards in your work area and for your work task. Ensure there are proper safeguards in place to prevent an eye injury. If there is a safeguard missing, stop the work task and correct the problem.
- Always wear approved safety glasses, face shield, or goggles. The type of PPE needed will depend on the work task. Three out of every five victims of eye injuries on the job were not wearing any eye protection.
- If you get something in your eye do not rub or scratch it. Rubbing the eye can cause scratching of the cornea resulting in injury. Find an eye wash station or saline bottle to rinse out the object.
- If you get a chemical in your eyes, remove your contacts if there is any in and begin to rinse your eyes out.
- Do not put yourself in the line of fire of hazards. Stand upwind and out of the line of fire if debris or dust is blowing around the work area. If there is welding activities going on, ensure there is a protective barrier in place to protect employees in the area. Eliminate the chance of getting something into your eye.

Discussion points:

- What are some hazards we have onsite that can injure our eyes?
- What job tasks require us to wear a face shield onsite? What about goggles?
Fatigue

Your ability to work safely is one of the most important safeguards in protecting yourself and others while at work. When you are not able to fully focus and perform your duties correctly, you could be leaving yourself at a risk for injury. Fatigue on the job is a major problem in the United States for workers. Fatigue leaves workers performing at lower levels and this exposes them to higher chances of an injury or an incident occurring. It is important to prevent fatigue while on the job to keep yourself and those around you safe.

Fatigue in the Workplace Statistics

- Fatigue carries an overall estimated cost of more than $136 billion per year to employers in health-related lost productivity.
- 1 in every 5 workers are sleep deprived.
- Poor sleeping habits and fatigue lead to stress on the job
- In a survey by Caremark Rx Inc. of 29,000 adults, 38% reported feeling fatigue at work in the last two weeks.

Fatigue Causes

- Lack of sleep
- Too many demands at work or home
- Medication
- Other health problems such as depression or anxiety

Safe Work Practices to Prevent or Improve Fatigue Issues

- Get plenty of rest. It is recommended to get a minimum of seven hours of sleep a night by most experts.
- If your work schedule is too demanding or the hours you are working are making you feel fatigued every single day, talk with a supervisor. Sometimes responsibilities or schedules can be altered to improve productivity and safety in the workplace.
- It is important to understand the side effects of medication before using it at work. Talk with your doctor to make sure he/she understands your work responsibilities to ensure the medication will not interfere with your performance.
- Take care of your health. Addressing other health issues can greatly improve how you feel both at home and at work.
- Eat a better diet. Food to humans is as gasoline is to a car- if you put dirty gas in your car it will not run well. Same goes with your body!
• For short periods of less intense fatigue, use caffeinated beverages to help you wake up. Another option is to get up from where you are working to stretch or take a walk.

Discussion point:

- What can we do to combat fatigue onsite?
Fire Safety at Home

Over the years house fires have greatly decreased, but they still pose a risk to every family today. According to the NFPA, there were 369,500 house fires in 2013. These fires resulted in 2,755 deaths and $6.8 billion dollars in property damage. It is important to take fire safety in the home seriously.

Interesting Facts about House Fires

- House fires peaked around the dinner hours between 5:00 and 8:00 p.m.
- Cooking equipment is responsible for a majority of fire related injuries
- Only 20% of reported house fires occurred between 11:00 p.m. and 7:00 a.m. However these fires caused half (51%) of all home fire deaths.
- 60% of house fire deaths occur in homes with no working smoke alarms.

Ways to Prevent a Fire in the Home

- Keep combustible items at least three feet away from objects that create heat such as heaters.
- Never smoke in bed or while lying down on a couch.
- Do not leave portable heaters on overnight.
- Keep lighters and matches out of reach where kids cannot get to them.
- Do not leave the kitchen unattended when cooking. Unattended cooking was a factor in one-third of reported home cooking fires.

Other Safety Measures

- Install smoke alarms on every floor of the house and in every bedroom. Test the alarms at least once a month and change the batteries as needed.
- Have an approved and functional fire extinguisher in the kitchen.
- Have a plan of evacuation and teach kids what to do if there is a fire. Have backup plans in case the fire blocks the primary route or exit.
- Practice fire drills periodically with the whole family.

The best way to avoid a fire in the home is to take action towards preventing one. Follow the prevention measures mentioned above. The next best thing to do is to be prepared if there is a fire in the home. Having a plan and practicing that plan can keep your family safe during a fire situation.

Visit NFPA.org for more information on fires and fire safety.
Fixed Open Blade Knives

Knives are extremely dangerous tools. One study done on injuries related to knife use reported 8.2 million injuries that needed to be treated in the ER between 1990 and 2008. That is an average of almost 1,200 injuries a day. There are many companies that prohibit the use of fixed open blade knives while on the job. Utility knives or folding pocket knives that lock the blade into the open position is often considered a “fixed open blade knife”. There are many injuries every year due to these types of knives. The hazards of these knives need to be considered and safer options should be looked at to reduce injuries.

Knife Injury Statistics

According to OSHA, over $300 million each year is spent on hand lacerations. Many of these lacerations are caused by some type of knife use. Injury can also occur to other body parts. The legs are a common site of injury due to people cutting in a downward motion leaving their legs in the line of fire. The abdomen also faces the same injuries from line of fire incidents as well as workers leaving the blade open in their pockets.

Right Tool for the Job

Not all knives are created equal and not all cutting tasks require knives. There are many different types of knives and cutting tools available on the market. Work with a supervisor or safety professional to evaluate work tasks to decide what type of knife is appropriate and safest to use for the job. For some tasks such as cutting zip ties, some type of clippers or safety scissors are more efficient and safer to use compared to knives. Many industries and work tasks do not need a fixed open blade knife. The majority of times some type of safety knife is sufficient to use. There are many different types of safety knives on the market. A common type of safety knife is one with a self-retracting blade. A user has to push a button or apply pressure on the handle on the knife for the blade to be exposed. Once pressure is taken off the blade retracts back into the knife. This type of knife and other kinds of safety knives can reduce injuries.

Best Practices When Using a Knife

- Make sure the knife blade is sharp. Have the blade sharpened if it is a fixed blade knife or replace the blade on utility knives. Dull blades require more pressure or unsafe operation to cut or slice through something.
- When cutting, make sure your body parts are never in the line of fire.
- Never test the sharpness of a knife with your finger.
- If you are using a knife with a locking blade, always ensure the blade is fully placed back into the closed position before putting it back into your pocket.
• Wear cut resistant gloves when using a knife.

Summary

There are many other hazards and best practices depending on the work tasks being performed. For example, considerations and best practices regarding knife use vary greatly between an electrician and a cook in a restaurant. Evaluate the work tasks and the knives being used for these tasks. There is always a safer option outside of the standard locking blade utility knife or pocket knife.
Ground Personnel and Heavy Equipment

Being on the ground on a construction site is a hazardous situation. There are many moving parts and hazards present for ground personnel. Heavy equipment is a major hazard on a construction site. It is important to consider the hazards heavy equipment creates for the individuals working around these machines and how to mitigate these hazards.

Three Common Hazards Created by Heavy Equipment

- Struck-by hazards created by the operation of heavy equipment is the top concern for the personnel working around these machines. Backing up, moving attachments, and suspended loads are all struck-by hazards for ground personnel.
- Noise- The noise created by these machines can exceed OSHA’s action level of 85dBA. The engines of these machines, the back-up alarms, and the noise created at the point of operation all lead to loud levels of noise for ground personnel. This noise can also drown out important communication between workers.
- Dust and flying debris created by the operation of heavy equipment is another safety concern for workers near this equipment. Eye injuries as well as respiratory issues can result from being exposed to the flying debris or dust generated by heavy equipment.

Best Practices When Working Around Heavy Equipment

There are many safeguards, safety policies, and safety procedures that can be in place to protect workers on the ground on construction sites that have heavy equipment present. Some common best practices to protect ground personnel from the mentioned dangers of heavy equipment are:

- Eliminate foot traffic from areas where heavy equipment is operating.
- Use spotters for heavy equipment operation when it is needed and safe to do so.
- Communicate with the operators of the equipment when working near their operating area.
- Stop heavy equipment when possible before entering their area or passing through their work area.
- Always leave yourself an out when working around heavy equipment. Never place yourself in the line of fire or in a position where you cannot move out of the way of danger.
- Use hearing protection when noise levels exceed 85dBA.
- Use a water truck onsite to suppress dust to protect ground workers and the public.
- Always wear safety glasses with side shields when on construction sites.
Summary

Working around heavy equipment creates many hazards; it is necessary to take the proper time to address these hazards in order to remain safe. Never assume an operator can see you on the ground. Always communicate your location to the operators. When necessary, stop heavy equipment to safely be able to complete a work task or pass through a work area.
Habits and Safety

We all have habits that we follow on a daily or weekly basis. These habits have a major effect on our life. They also affect the choices we make at work. The choice to follow a safety procedure on any given day could be affected by a habit you have had for years.

Your Habits

Think about the habits you follow every single day. Start with waking up. Did you hit the snooze button once or twice? Do you do this every day? What about breakfast? Did you cook in the house or did you stop at the same gas station you do every day to grab a quick bite to eat? Most likely the choices that you have made from the point you woke up today to right now in this safety meeting are the same choices you make every single day. These daily choices are your habits.

How Habits Work

According to Charles Duhigg, who is the author of the book *The Power of Habit*, there is a “habit loop”. The habit loop he describes in his book is a three part process. The first part of the process is the cue or trigger, the second is the routine or behavior itself, and the third is the reward.

Let us take the example of you repeatedly hitting the snooze button and look at it as a bad habit you want to break. We will discuss the habit by looking at Duhigg’s habit loop. The trigger of this habit would be your alarm going off in the morning. While the alarm is blaring your mind tells you it is okay to hit the snooze button and continuing sleeping because in the past you have done it. Hitting the snooze button would be the behavior. The reward would be getting more sleep. To break this habit you would need to change the trigger or adjust the reward to change the behavior over the long term.

Looking at the trigger first, maybe changing the location of your alarm and making it more difficult for you to hit snooze will help break the habit. Another option to help break the habit is experiencing a different reward which would be having more time in the morning. By not hitting the snooze button repeatedly you will experience a new reward of more time and less rush in the mornings before work. This reward alone over time may lead you to curve the habit of hitting snooze.

Habits and Safety

Your habits may be leading you to consistently take shortcuts and not follow safety procedures. Are there certain safety procedures you always follow and others that you rarely follow? For example, you are a welder and every single day you complete your JSA, but many days there
are times you choose not to lower your helmet while welding. Why do you choose to follow one safety procedure but not the other? Maybe you complete your JSA every day because you have to turn it in everyday and you have learned that it gets reviewed. The reward would be not getting disciplined by a supervisor so you choose to do the JSA every day. On the other hand you choose not to lower your welding helmet because it is hard to see through and you know supervisors rarely enter your work area. The reward is that you feel it is quicker to do the task, you can see better, and you have not been injured yet. In your mind there is no consequence that will most likely come that is more negative than the reward you receive from not putting the helmet down so you continue the behavior.

Summary

Pay attention to the habits you hold on to and how they affect you daily. How many of these habits are positive ones and how many are negative? Look at the choices you make at work and if they lead to negative behaviors then look at changing them. By addressing the trigger or experiencing a different reward for your behaviors you may find a way to change bad habits.
Hand Injuries and Injury Prevention

We use our hands for virtually every task we do. Without our hands and all of our fingers we could not complete work easily. While gloves are the most common form of PPE found in the workplace, hand injuries are still the second leading type of injury on the job.

Hand Injury Statistics
(source: www.bls.gov)

- There are 110,000 lost time cases due to hand injuries annually.
- 1 million workers are treated in an ER for hand injuries annually.
- 70% of workers who experienced a hand injury were not wearing gloves.
- Another 30% of victims had gloves on, but they were damaged or inadequate for the work task.

Three Common Types of Hand Injuries

1. Lacerations are the most common type of hand injuries. Lacerations are due to sharp objects or tools. Often inadequate gloves are used during an activity that involves a sharp tool. A glove with Kevlar is effective in protecting the hand against a cutting or slicing motion. A straight stab motion can still easily penetrate these gloves. Caution needs to be used when using any tool that can easily penetrate the skin.

2. Crush injuries are usually due to employees placing their hands in the line of fire between two objects or in a rotating piece of equipment. It may be more beneficial to not wear gloves where they can get caught in machinery and pull the hand into a crush injury situation. Evaluate the work task with a subject matter expert or safety professional to decide what protection, if any, is needed on maintenance tasks.

3. Fractures occur when there is a sudden blow to the bones in the fingers or hands. Motor vehicle accidents often cause fractures to the hands. Another common cause of fractures is an individual extending out their hands to catch themselves from a fall.

Safe Work Practices

- Use tools instead of your hands when possible to get your hands out of the line of fire during a work task. Tools such as push sticks when using a table saw is an example that removes your hands from the line of fire.
- Avoid using fixed open blade knives whenever possible. There are safety knives that limit the length of the blade exposed. They also have a safety feature that retracts the blade when pressure is let off the handle or switch that controls the blade.
- Never put your hand in an area where you cannot see it.
• Always wear the proper gloves for whatever work task you are doing. Understand the limitations of your gloves and what work tasks they are appropriate for.
• Never work on an energized piece of equipment. Lock and tag out the equipment to ensure there will not be unintentional start up while you are working on the equipment.

Discussion points:

-What are some of the biggest hazards to our hands onsite?

-Next time you are doing a simple task at home such as setting the table for dinner, getting ready in the morning, or cleaning- try doing the task with one or two less fingers. It sounds like a silly exercise, but this can help put into perspective how hard it would be to complete tasks without some of our fingers. It is easy to take for granted our health and abilities when we have had them for so long.
Hand Tool Inspections

There are many injuries while using hand tools on the job. Many of these injuries occur from improper use, but there are also injuries that involve a tool that was broken or in need of repair. What tool is being used will decide what needs to be inspected on it. In this safety topic we will discuss basic hand held tools that are not electric or pneumatic.

Common hand tools found on almost every jobsite and at home across the country are screw drivers, hammers, chisels, and wrenches. This is not an all-inclusive list, but these are the most commonly used hand tools.

Common Hand Tool Inspection Items

**Hammers**- Ensure that the handle is not broken or chipped. If a handle is taped, more than likely it is broken and needs replaced. On any tool, tape is not a manufacturer’s approved fix for a needed repair. Make sure the head of the hammer is secured to the handle properly. Throw the hammer away if part of the claw is broken off.

**Screwdrivers**- Ensure the handle is not chipped or broken. Many people will use the screwdriver as a chisel and hit the back end of it with a hammer. This causes damage to the screwdriver and will damage the handle. If the head of the screwdriver is chipped or worn down, replace the screwdriver.

**Chisels**- Chisels are strong tools, but just like any other tool they will begin to break down over time. Check the back of the chisel. Often times, the back will begin to mushroom. When mushrooming occurs the chisel either needs to be repaired properly or replaced.

**Wrenches**- Check that the wrench is not bent. Replace any wrench that is chipped or excessively worn. Losing the grip on a bolt due to a worn or broken wrench can easily cause hand injuries to the user.

General Hand Tools Best Practices

- Keep tools clean. Dirty tools are harder to use safely and properly.
- Do not modify hand tools. Keep the manufacturer’s design intact.
- Secure all hand tools and store them away properly. Tools left out are much more likely to get lost, stolen, or damaged.
- Use tools how they are designed to be used. This will keep the tool in good condition longer and you safe when using it.
Discussion points:

- Are the hand tools we have onsite safe to use?

- Today in the field, look at every hand tool in your work area. Turn any tools into your supervisor that are broken or need replaced.
Health is Everything

We all know that taking care of our health is important, but not many people actively pursue a healthy lifestyle day in and day out. Our bodies are essentially machines and when they are not taken care of they begin to break down. This occurs naturally over time with old age, but many millions of people face health issues that are not normal to have and often accelerate the aging process or cause a premature death. It is important for all of us to consider what our health means to us and what we can do to improve it.

Health Issues in the United States

While many people believe we are healthier than ever before because life expectancies are at an all-time high, the quantity of years lived does not exactly equal quality of health. With improvements in medicine and a great understanding of the human body there should be lower cases of disease and sickness, but this is not the case. A few alarming disease statistics in the United States:

- More than 36% of Americans are considered obese (CDC.gov)
- 29 million people in the United States have diabetes and another 89 million are considered pre-diabetic (CDC.gov)
- Heart disease is the leading cause of death in the U.S. (CDC.gov)
- There is an average of 735,000 heart attacks each year
- Cancer claims an average of 1,630 lives every day

These statistics are not meant to strike fear in anyone. It is just important to realize the sheer amount of disease and the suffering due to them we still experience today in our advanced society. The chance of suffering from any of the above diseases and problems is greatly reduced when you make the choice to live a healthier lifestyle. There are many small changes you can make today that can have a huge positive difference over the rest of your life.

Choose a Healthier Lifestyle

There are many different things you should or could be doing to improve your health and reduce your chance of disease. While it is impossible to mention all the different positive choices we could be making here are a few:

- Get more sleep. Most studies recommend at least 6 hours.
- Stop smoking, using tobacco, or alcohol in excess.
- Eat less fast food or processed foods. Choose whole grains, vegetables, and lean cuts of meat.
- Stop drinking sugar-filled drinks and choose water instead.
• Stress less. Eliminate the stressors in your life or find productive ways to cope with them.
• Get active. Our bodies are not built to sit around!

These are just a few basic things we all can do to live a healthier life. It is easy to disregard this advice or stick to bad habits because it can be hard to make change. Bad habits can be broken. Think of someone you know who is in bad health and is very limited in what they are able to do. No one wants to live like that. Think about the last time you had the flu and how much you appreciated how great you felt once you got over it. Well heart attacks unlike the flu cause permanent damage and will forever affect your health for the rest of your life. Be proactive and make change today for a healthier tomorrow. If you do not have your health you have nothing.

Discussion point:

-Did you know that drinking one can of soda a day adds up to over 50lbs of sugar in a year?
-Is there anything else we could start doing today to improve our health tomorrow?
Heart Attacks

Every single year there are 735,000 Americans who suffer heart attacks according to the CDC. Out of that number, 525,000 of them are first time heart attack victims. Heart disease and heart attacks are an unfortunate reality in our country. There is a good chance that sometime in your lifetime you will witness someone suffer from a heart attack or you yourself will be a victim.

It is important to know the signs and symptoms of a heart attack. It is equally important to know what to do if someone around you is having a heart attack. Recognizing an emergency and getting the individual the proper care quickly can mean the difference between life and death.

Signs and Symptoms of a Heart Attack

In movies and TV we often see a person turn completely white and begin to clutch their chest when they are having a heart attack. While this could be the case in real life, it often is not. Many of the signs and symptoms of a heart attack are much more subtle. Here are some of the signs the CDC lists on their website:

- Chest pain or discomfort
- Upper body pain or discomfort in the arms, back, neck, jaw, or upper stomach
- Shortness of breath
- Nausea, lightheadedness, or cold sweats

Not all of these have to be present to be a heart attack. Pay attention to your body and what it is telling you. If you think you or someone around you is displaying heart attack symptoms do not brush them off.

What to Do If Someone Has a Heart Attack

- Call 911. Even if it ends up not being a heart attack it is truly better to be safe than sorry. Getting the proper medical attention quickly for a heart attack victim is their best chance to live.
- Try to keep the person calm, and have them sit or lie down.
- Have the person take an aspirin as long as they are not allergic and are conscious to do so.
- If the person stops breathing, you or someone else who is qualified should perform CPR. If you don't know CPR, the 911 operator can assist you until the EMS personnel arrive.
Summary

Take heart attack symptoms seriously. We know most of the people we work with pretty well. If something seems wrong talk to the person or get a supervisor involved. Know what your emergency response plan at your worksite for a medical emergency like a heart attack. Knowing who to call, what the address of the worksite is, and who is CPR trained onsite can save the victim’s life.

Discussion point:

- Review your company’s emergency response plan for a medical emergency.
Heat Stress

Heat stress can be a killer on the jobsite. Deaths from heat-related issues between 2005 and 2009 rose to higher rates than any others observed during any other 5-year periods in the past 35 years. Outside of the direct consequences such as heat stroke, heat stress can cause incidents due to loss of focus or excessive fatigue on the job.

Heat-Related Illnesses
(source: webmd.com)

- Heat Cramps- Are painful, brief muscle cramps. Muscles may spasm or jerk involuntarily. Heat cramps can occur during exercise or work in a hot environment or begin a few hours later.
- Heat Exhaustion- There are two types of heat exhaustion. 1. Water depletion- Signs include excessive thirst, weakness, headache, and loss of consciousness. 2. Salt depletion- Signs include nausea and vomiting, muscle cramps, and dizziness.
- Heat Stroke- Heat stroke is the most serious heat-related illness. Heat stroke can kill or cause damage to the brain and other internal organs. Heat stroke results from prolonged exposure to high temperatures -- usually in combination with dehydration -- which leads to failure of the body’s temperature control system.

If anyone is displaying symptoms of a heat-related illness, it is important to get them the proper medical attention they need before the problem turns into heat stroke. For people displaying symptoms of heat exhaustion, have them stop work and get to a shaded area. The affected person needs to consume water or electrolyte replacing sports drinks. The person should not return to work the rest of the day.

Anyone who is displaying symptoms of a heat stroke, immediate medical attention is needed. Delaying calling 911 could result in irreversible injuries or death. Symptoms of heat stroke include fainting, throbbing headache, dizziness, lack of sweating, vomiting, or behavioral changes such as confusion. The person should be cooled down immediately in a shaded area or indoors. DO NOT put ice cold water on the victim as this can cause shock. Use cool water to lower the body temperature of the victim. Remove any unnecessary clothing and fan the victim until medics arrive.

Safe Work Practices

- Allow for acclimatization to a hot environment before any strenuous work begins. It takes roughly two weeks for an individual to acclimate to a hot environment.
• Drink plenty of water during strenuous activities especially in hot environments. An average person sweats between roughly 27 oz. to 47 oz. per hour during intense labor. To put that amount into perspective, an average water bottle holds 16.9oz.
• Take frequent breaks in the shade or indoors where there is AC.
Heavy Equipment

Heavy equipment such as cranes, maintainers, bull dozers, front loaders, dump trucks, excavators, etc. are used on virtually every single construction site. There are many hazards created by the use of this equipment for those who operate it and especially for those who work around the equipment. It is easy to become complacent when working around these machines every single work day. The Center for Construction Research and Training states that heavy and mobile equipment were responsible for 7,681 construction worker deaths between 1992 and 2010. It is important to continually remind yourself of the hazards of working around heavy equipment.

Hazards Created by Heavy Equipment

There are many different hazards associated with heavy equipment. It is impossible to list every single hazard and scenario down here during this safety talk. Instead we will discuss the two major hazards associated with these work tasks that are responsible for the majority of injuries and fatalities.

**Struck-by incidents**- One of the biggest exposures for a fatality on a construction site is ground personnel being struck by moving equipment. OSHA states approximately 75% of struck-by fatalities involve heavy equipment such as trucks or cranes. It is everyone’s responsibility to look out for one another while working around this equipment. Work areas where heavy equipment is should be clearly marked and barricaded. Unnecessary foot traffic should be eliminated in these barricaded work areas. Ground personnel entering a work area where there is equipment operating need to make their presence known to all operators in the area. Operators should avoid backing whenever possible and need to stop their work task if they lose sight of any ground personnel. A spotter should be used if equipment is operating in a tight area or when operating around ground personnel. In certain situations it could more hazardous to use a spotter. Plan work tasks accordingly and eliminate the need for a spotter if possible.

**Caught-in or between incidents**- These incidents are very similar to struck-by incidents, however there are differences. A struck-by incident is when an object striking a person causes the injury. A caught-in or between incident is when there is an injury due to crushing between two objects. An excavator bucket swinging around and striking a person in an open field would be a struck-by incident. An excavator counter weight that turns and pins a person against a wall would be a caught-in or between incident. Many of the same safeguards discussed above will protect workers from being involved in a caught-in or between incident. One important safeguard in protecting yourself from these incidents is to stay out of the line of fire and always leave yourself an “out”. You should first always consider the safest place to be around equipment with regards to the line of fire. Never put yourself in a situation where you do not
have an out to escape danger. It is important to always be able to get out of the way if other safeguards fail and you are put in a situation where you can become a victim of these incidents.

Discussion points:

- What are some of the most effective ways to avoid incidents from the two hazards?
- Are there unnecessary risks we are taking onsite with regard to heavy or mobile equipment?
Heavy Equipment Operation

Heavy equipment is used on many different kinds of work sites all around the world. This equipment is very effective for the job it was designed to do, but it can also be very hazardous. Proper work planning as well as operating equipment within its designed limits are important basic steps for safe operation.

Hazards of Heavy Equipment

- Struck-by hazards- Heavy equipment is responsible for many injuries and fatalities in the workplace. Ground personnel are far too often struck by equipment when they are in the line of fire.
- Property damage- When operators do not see vehicles, materials, objects, tools, buildings, etc. in their area of operation property damage occurs. This costs employers millions of dollars a year in losses.
- Contact with powerlines- Equipment should stay at least 10 feet away from powerlines and poles. When voltage of the lines increase the distance to stay away from lines also needs to increase.
- Leaks- Leaks can cause issues in the equipment as well as damage to the environment. Many project owners have a very strict zero tolerance policy when it comes to leaks.
- Equipment failure- Hydraulic or other systems that fail can cause a major incident.

Best Practices Relating to Heavy Equipment Operation

- All equipment should be inspected prior to use. Any problems found with equipment should be corrected before it is used.
- Equipment should have seatbelts and a roll over protective system to protect the operator in case of roll over or crash.
- Work areas should be properly delineated and enough space given to heavy equipment to operate properly. Clear out all unnecessary personnel, objects, and vehicles from where the equipment is operating.
- Operators should complete a walk around of their equipment every time before getting back into the cab to be sure no objects, people, or vehicles are in a blind spot.
- Proper training and fit-for-work. Employees need to be familiar with the equipment that they operate. Employees also need to ensure that they are not operating equipment if they are excessively fatigued or sick.
Summary

This is a small list of the many hazards that are present when dealing with heavy equipment on a work site. Consider what unique hazards the equipment and job tasks create on your work site. Constant focus on pre task planning as well as what safeguards are needed is important to remain safe while operating heavy equipment.

Discussion points:

- What risks are we still facing onsite in regard to heavy equipment operation?

- What steps can we take to create a safer work environment?
Helping Out

When we see someone struggling with a task the first thing we naturally want to do is jump in and help. Most times, this is perfectly fine and there is no issue that comes from jumping in to help out. There are times however when it is better to let someone else intervene or to not intervene at all.

More Harm than Good

We all have heard the saying “he did more harm than good”. It is often used when someone has good intentions of helping out, but instead disrupts or messes up on a work task. Many tasks need the proper tools, training, knowledge, and skills to complete them safely and efficiently. If you happen to be a passerby and jump in to help someone you may do more harm than good.

Two Real Life Scenarios

1. An extreme, but unfortunately common example of this is confined space fatalities. Often an employee is spotted in a confined space unconscious on the ground. The first instinct of the other workers is to enter the space to rescue the unconscious individual. This leads to multiple fatalities due to lack of oxygen or the presence of another gas.

When you witness someone injured or unconscious the first thing you need to do before helping them is to check the area to ensure you are in no danger. When someone is unconscious there can be multiple reasons why he or she is unconscious which could also cause you harm as a rescuer. Alert the proper personnel before attempting to give aid to an injured individual.

2. An individual has little work to do so he decides to help out at the next workstation. He has never been trained on the equipment, but figures he can handle the task. The task is to punch holes for screws in a computer board. After an hour of punching holes another coworker realizes that every single hole he punched was to the wrong measurement.

This type of doing more harm than good occurs often. Many employees want to help out their other coworkers or look good in front of their supervisors so they will go above and beyond their actual job responsibilities. Many tasks require specific knowledge and skills. Even if it is a task you are familiar with or have done in the past it can change day to day. It is important to fully understand the work task as well as the associated risks before giving a hand to help out.
Summary

Take a second to think about whether or not you have everything necessary to perform a task safely and efficiently. Talk with your coworkers or supervisor prior to jumping in to give a hand to understand the scope of work and the hazards involved.

Discussion point:

- Does anyone have an example of a person doing more harm than good when trying to help out?
Hierarchy of Controls

There are multiple safeguards to control any one hazard. Each level of these safeguards serves to protect employees. Some safeguards or controls are more effective than others. The hierarchy of controls outlines the controls used to mitigate a hazard from most effective to least effective. The hierarchy can have additional or less levels of controls listed depending on the reference you are looking at. The hierarchy we will discuss is listed as: elimination, substitution, engineering controls, administrative controls, and PPE in our example.

Real World Example

To better understand the hierarchy of controls we will provide a real world example. The example: A painter will apply a paint with a high level of VOCs to a metal surface in a factory.

Elimination: Eliminate the hazard by not completing the process. The process can be outsourced or completed by an automated process to take painter out of the situation.

Substitution: Use paint with a lower VOC content to protect the painter. There is almost always a less hazardous option when dealing with chemicals.

Engineering: Apply the paint in a paint booth with a proper ventilation system. This will help protect the painter as well as other employees in the factory.

Administrative: Train the painter to properly and safely complete the task. Use job rotations or breaks to limit the painter’s exposure to the paint.

PPE: Provide a respirator that will protect the painter from the fumes of the paint. Also provide googles to protect the eyes and some type of coveralls to protect the skin.

We should always strive to eliminate as many hazards as possible. If elimination is not possible then other controls lower on the hierarchy should be implemented to protect employees. PPE is always a last resort and should never be looked at as a primary control for a hazard. The more safeguards in place for a hazard the least likely an incident will occur. Always verify controls are in place and never just assume that they are.

Discussion points:

- Give me some examples of controls and where they would fall on the hierarchy of controls.

- Are we relying on a less effective safeguard instead of eliminating the hazard or implementing an engineering control during a work task onsite?
Horseplay

Horseplay leads to many injuries and property loss damage incidents in the United States every year. A quick search on YouTube or Google will show you hundreds of these types of incidents. While you should enjoy the work that you do, your work should always be completed safely and responsibly. Some companies actually condone and provide resources to employees to horseplay and fun have such as Google, but many companies have a zero tolerance for it in their workplace. While horseplay may seem innocent and fun it can lead to devastating consequences.

Examples of Horseplay Leading to Injuries

- A guy pulls the chair from beneath a coworker as he goes to sit. The victim falls and bruises his tailbone and cannot properly walk for weeks.
- A man decides it would be funny to blow an air horn in a coworker’s ear. This action ruptures the victim’s eardrum, requiring medical attention.
- A worker decides to jump on the side of a piece of equipment and catch a ride. The operator hits a bump at a fast speed in an attempt to scare the other worker. The worker falls off and is run over by the equipment.

Some Safety Tips Involving Horseplay in the Workplace

- If your company condones or allows some type of horseplay know the limits. Just because it is allowed does not mean it cannot lead to an incident.
- Stay busy at work. Excessive downtime often leads to horseplay or other activities to pass the time that can distract workers from tasks going on around them.
- Do not initiate horseplay. You do not want to be the one responsible for an injury, fatality, or property damage incident in your workplace.
- If others around you are taking part or initiating horseplay, report it to a supervisor. Do not just turn a blind eye. An incident can have a huge effect on you, your job, and the company as a whole depending on the severity of the incident.

Discussion point:

- Have you ever witnessed horseplay lead to an injury or a property damage incident on a job?
Housekeeping (Construction Industry)

Companies that hold general housekeeping of work areas to high standard usually have a better safety culture than those companies who do not. Housekeeping is an important part of a robust safety program. Poor housekeeping promotes inefficiency as well as leads to injuries and property loss.

Poor housekeeping leads to:

- Slip, trip, and fall injuries
- Property damage incidents involving moving equipment or vehicles
- Caught in/between injuries
- Sprains/strains due to unnecessary movements of objects that are in the way

Ways to Improve General Housekeeping in Your Work Area

1. Create lay down yards for equipment and tools when out in the field. At the end of the task, return tools and equipment to their proper locations such as a workshop or toolbox.
2. Designate walking areas or paths for employees in work area and keep equipment and objects out of that path.
3. Designate parking areas within specific work areas to avoid clutter and vehicles or equipment striking objects around them.
4. Barricade or place orange fencing around objects or areas where equipment, vehicles, or people should not be. This also helps control points of access into work areas.
5. Keep tools and equipment clean. Heavy equipment should not have loose cargo such as trash in the cab. These items can be a distraction or interfere with the controls.

Paying attention to the small details translates to bigger changes in the safety culture in the field. Not only does good housekeeping help to lower property loss incidents as well as injuries, but it also shows the maturity of a safety culture within a company. Many of us work for a larger contractor or client in the construction industry and when your work areas are always clean and tidy it shows responsibility of your company to address the small issues onsite. Overlooking simple issues such as housekeeping can lead to big problems with injuries and property loss.

Discussion point:

-How can we improve the housekeeping in our work areas?
How Observant Are You- The Dollar Bill Exercise

We live in fast times- both at home and work. With everything going on around us between stressors and the distractions of our environments, it is easy to glance over the small details. When we miss the small details at work we begin to lose focus on addressing hazards that can lead to injuries. A quick exercise can demonstrate how easy it is to lose sight of the small details.

Dollar Bill Exercise

We have all handled dollar bills throughout life, more than likely you have one in your pocket now. Without pulling one out, give me some descriptions of a one dollar bill.

(The audience will probably name 6 to 8 things about dollar bills. After they start having trouble naming things, either ask them to pull out a dollar bill or put one on a projector screen. After the audience is looking at one ask again for details. More than likely they will continue to name basic details. Once they start slowing down begin to point out the endless amount if features on a dollar bill. You can easily name 40 different things, get creative and obscure with your observations to demonstrate how small the details can be. If you want to have a longer discussion, refer to the information in this article- http://www.onedollarbill.org/decoding.html. Use the article to discuss how we can be misinterpreting or missing information from the world around us from not paying attention or not being informed. For example, you can talk about what the letters stand for in the serial number and relate it back to being informed about what certain symbols mean on an equipment label).

So what does this exercise tell us about observations and glancing over the small details? Just like a dollar bill, we see our work areas every day. What details are we not paying attention to? What hazards are we either missing or being complacent with? What details or information are we missing in our work procedures? The honest answer is probably more than we want to admit.

How Can We Improve Our Observations?

First we need to take the proper time to do a thorough observation of objects, tools, equipment, and the work environment for a work task. Being observant is a skill, but we also need to make a conscious effort to dedicate time to evaluate the work area around us. Walk around your work area view it from different perspectives. Focus on details that you normally skim over. Use past experiences, lessons learned, safety shares, or training to identify potential hazards. Try putting yourself in someone else’s shoes such as a safety manager or supervisor. What things in the work area would they have an issue with or want corrected? Really get picky
about the details of your work environment. Be honest about what is a hazard in your work area and what it would take to fix it. The little details can lead to many injuries and incidents.
How We Represent Our Company Outside of Work

We live in a world where we are constantly connected with any human who lives in a developed country. We send and receive a lot of information through phones, the internet, TV, radio, email, etc. to not only the people we intend to send a message to, but often times, a much larger group. It needs to be understood the choices we make, the things we say, the information we put out there, can be seen by virtually anyone with access to a computer. It is important to understand that there can be negative repercussions due to your decisions outside of work not only for yourself, but even the company you work for.

We like to think that work and home are two separate parts of our lives, but we all know there is a much more of a cross over between the two. Today, more than any other generations have experienced, we are put out there for all to see. Whether it is on purpose through work you choose to do on your own or some bad choice you made, it can all be put onto the internet or somewhere else for all to see.

We have all seen news stories of someone who makes comments or does something that the public does not agree with when they are off the job, but the media or others soon connect the individual to the company they work for. For example, a man is frustrated with America being at war with the Middle East and goes on a political rant on Facebook that includes vulgar racist language. The problem is, he has put this information out there for all to see and even if he deletes it, there can be copies or screen shots others have made. Depending on what he says, who he outrages, and what he does for work will determine what the fallout is for not only him, but the company as well. In today’s age it isn’t “Bob said” it is “Bob who works at Acme Media said” or “an employee from Acme Media said”. We need to be aware of how we represent the different organizations in our lives and how closely each part of our life is connected.

Summary

Be aware of the connection between the choices you make at home and how they affect work. We no longer only represent ourselves in this day of age of technology. We represent everything we are a part of in our professional and personal lives and they are all interconnected.
Human Performance

When addressing hazards in the workplace most of the focus is put towards the physical hazards that could harm us. For example, hazards such as slips and trips, electrocution, heavy equipment, struck-by incidents, etc. are the topics focused on when looking for things that can seriously injure or hurt us. While there should be emphasis on the many physical hazards in our workplaces, human performance factors that affect our work need to also be addressed.

What are Human Performance Factors?

Human performance factors are factors that affect an individual’s ability to work safely and efficiently. They may also affect an entire workforce, but for this safety talk we will discuss a few of human performance factors and how they can affect you as an individual worker. Factors such as stress, time pressures, distractions, personal abilities, and lack of direction are some common human performance factors that can play a huge role in a jobsite incident such as an injury or property loss. There are many other factors that we will not cover in this short safety talk.

Human Performance Factors

Stress- There is good stress as well as bad stress. We are more familiar with the bad stress. Stress from work demands, home demands, family problems, health problems, etc. affect us every day. A combination of high expectations for productivity and limited resources to complete work often leads to high stress levels on the job. It is important to be able to handle stress in a constructive way. Exercising or taking time to enjoy hobbies is a good way to relieve stress. Recognize when you are stressed and step away from the situation to take time to relax.

Time Pressure- We all experience time pressures at work. When we try to accomplish too much in too little time incidents are going to occur. Proper planning and reasonable expectations from clients and managers can help alleviate the stress caused by time pressure. At the individual level, it is important to speak up when there is unreasonable expectations or you need additional help to get a task done in a certain time frame.

Distractions- There can be dozens of distractions affecting us at any one time. Personal situations at home, a ringing cellphone, wildlife in the work area, and other people around you are just a few common distractions we face on a daily basis. It is important that we recognize things that are distracting us from our work and eliminate them. The smallest distraction has the potential to cause a fatality.

Personal Ability- We all have our strengths and weaknesses. Sometimes we are given jobs that we are not adequately prepared for. It is important to have the proper knowledge and training
to complete a work task safely. If you feel that you are not qualified for a work task, discuss the options with your supervisor.

**Lack of Direction**- Unclear guidance by a supervisor can lead to many problems for workers. If you do not know what is expected of you or the work task you need to stop work and get clear directions. Many workers can feel embarrassed by asking questions and would rather proceed with a task before taking a moment to talk with someone who can clear things up for them. This can lead to an injury occurring or costly mistakes in production.

**Summary**

Human performance factors can have as much as a role in a jobsite incident as a physical hazard. It is important to recognize the role they play in our work day to day. When these factors interfere with our ability to work safely it is important to stop work and address the issue. Eliminate the hazards associated with human performance just as you such as an unguarded machine hazard or a fire hazard.
Importance of Communication

Proper communication is crucial for a job to run safely and efficiently. When communication is insufficient or missing totally there can be many negative consequences for employees and the company as a whole. Recognizing the communication tools for work tasks and the work environment is important to ensure the proper messages are being received.

Tools to Communicate in the Workplace

When someone says communication, the first thing you may think about is speaking words to another person or sending an email. These are just two ways to communicate, but there are many more ways found at work. Some other examples of communication include posters, labels, warnings, bulletins, pictograms, JSAs, SOPs, body language, etc. Depending on any number of factors, each of these tools of communication can be very critical to working safe.

Communication and Safety

Proper communication and safety go hand in hand. If there is no communication for a given work task then safety is also missing. Some common tools for communicating a safety message:

- Training is a way to communicate how to do a task and how to do it safely and is one of the first methods of communication used when preparing for a work task.
- JSAs are important tools to communicate the steps of a job task, the associated hazards of each step, and the mitigation actions to be able to work safely.
- Safety meetings or toolbox talks discussing work tasks and the associated hazards of the work are very important for work crews. Paying attention to the safety meeting information can protect you during your work task that day or sometime in the future.
- Labels are found on almost every piece of equipment, tool, and chemical in the workplace. Manufacturers put these labels on for a reason. They often relay some of the most important information regarding the hazards and safeguards of that product.

There are many other ways that safety is communicated in the workplace. Verbal communication is also very important. When you see a situation where someone could be hurt or there could be property loss you should always speak up. Have a conversation with the individuals involved in the task to voice your concerns. Involve the right personnel to correct a situation before an injury occurs.

Summary

Recognize all the different tools used in the workplace to communicate a safety message. Appreciate the time and resources dedicated to develop and use these tools every day.
Embrace the message they are conveying to keep you working safe and efficient. When communication is not used to its fullest potential there can be an increased chance for injury. Never be afraid to speak up when it comes to safety on the job.
Importance of Mentoring

No one has all of the answers. If you do, you are under-utilized and under paid. For the rest of us, there is always going to be times when we need help from someone else. It is important to feel comfortable asking for help when you need it or mentoring others when they need assistance.

Mentoring

Dictionary.com defines a mentor as a wise and trusted counselor or teacher. While that definition sounds like a formal and structured relationship between two people it isn’t always the case. Often times a mentor at work is just someone who you are able to seek guidance or expertise from. They are someone who has a lot of experience with a certain task or job and are willing to help younger or less experienced coworkers. Many companies understand the importance a mentor can have for a new hire and actually have an establish program to make sure new hires have a mentor on the job. There are a lot of benefits from having a mentor at work.

Benefits of Mentors at Work

1. **Less job stress**: Understanding your role at the company from someone who has went through some of the same experiences can help to reduce the stress of a job. Many times our friends or family may not understand the stressors and issues we deal with at work so having a relationship someone who understands the issues that your position can create can be beneficial.
2. **Less injuries and incidents**: Obviously when people with less experience are trained better and are given guidance there is less chance for injury. Experienced individuals have to be willing to step up and talk to lesser experienced individuals when they see them working unsafe.
3. **More efficiency**: Production goes up when a new hire understands how to properly do their tasks. Experienced individuals have learned many valuable tips and tricks over the years that can be helpful for new hires.
4. **Improved morale**: When everyone helps each other out at a company, it is a more enjoyable place to work.

Summary

If you do not have a mentor at work, think about reaching out more often to experienced coworkers around you. It does not have to a structured relationship or even defined as a mentor/new hire relationship. It can just be looked at as being able to approach someone to get guidance or advice when needed. If you are an experienced worker, look to help out those
coming up behind you. Everyone can learn from each other in different ways. Even new hire or younger individuals have life experiences that may drastically help someone who has a lot of experience in their field. Everybody wins when all the individuals on a worksite are able to work safely and efficiently.
Importance of Reporting All Injuries

We are all trained to report any near misses, injuries, or incidents to a supervisor or safety representative. Often times however many of these incidents, especially first aid type injuries, are not reported. Injuries are not reported because of many different reasons, but it is important to understand why all of them need to be.

Reasons Why Incidents Go Unreported

There are many reasons why incidents such as property damage, near misses, spills, and injuries go unreported. A major reason is often the individual’s pride. Most people do not want to admit their mistakes to others, especially at work. They may also fear the outcome from sharing what occurred with a supervisor. This fear may come from being afraid of being disciplined, what others think, or the repercussions from the incident. Another reason a person may not want to report an incident is because of the paperwork or energy involved in doing so. There are many other reasons why an individual may not want to share what happened to them, but this should never be the case.

Why it is Important to Report Injuries

There are many reasons why you should report any type of injury, no matter the severity. The most important reason is to make sure the situation or hazard is made safe for not only yourself, but the others at the worksite. Another reason is to further share your experience or the lessons learned from the incident with others to prevent it from occurring in the future.

With injuries, even just minor ones, it is important to get them looked at by a supervisor or safety representative. While many injuries, such as a small cut or an insect sting, may not seem like a big deal they can turn into one. A quick example: You are bit by some type of insect on a Friday afternoon at work, but decide not to tell anyone for various reasons. You leave work and are home for a few hours when you notice that the bite area is beginning to swell up. Along with the swelling, you notice that you have hives and are having trouble breathing. You realize it is a serious allergic reaction and need medical attention. You tell the doctor you were bit or stung at work and the treatment he gives you ends up being considered “medical attention”. Because it happened at work and you needed medical attention beyond first aid it is now an OSHA recordable injury. In this situation there are a few problems since the injury was not reported to someone at work immediately.

1. There is no record or witness to it happening at work which could raise concern by the employer whether or not the injury occurred at work. This may end up in a drawn out dispute since there has been many people in the past who have faked or had injuries off the job, but stated it occurred at work in an attempt for it to be paid through worker’s compensation.
2. If the injury was reported immediately someone may have been able to recognize that it may develop into an allergic reaction. There could have been options for first aid instead of medical treatment to treat the issue before it worsened which would have saved you a trip to the hospital and the company an OSHA recordable.

Summary

All injuries need to be reported, no matter how small. Not only does it protect you, but it also protects the company as a whole by possibly preventing a first aid injury developing into an OSHA recordable. You never know when something that seems minor in nature will develop into something more serious. There are also always lessons that can be learned, even from just minor injuries, to prevent others from occurring in the future.
Insect Sting Allergies

There are many allergens that can cause an allergic reaction. One of the most common allergens and hardest to avoid is insect stings. According to the American Academy of Allergy Asthma and Immunology, it has been estimated that potentially life-threatening allergic reactions to insect venom occur in 0.4 percent to 0.8 percent of children and 3 percent of adults. Even after experiencing a normal reaction to insect stings, it is possible to experience a more serious allergic reaction at any time during your lifetime. It is important to avoid insect stings whenever possible as well as how to respond when someone is suffering from a severe allergic reaction.

Insect Stings in the United States

According to AAACI.org, there are five insects that cause the majority of allergic reactions in the United States. These insects are honeybees, hornets, wasps, yellow jackets and fire ants. According to NIOSH, thousands of people are stung by insects each year, and as many as 90–100 people in the United States die as a result of allergic reactions. This number may be underreported as deaths may be mistakenly diagnosed as heart attacks or sunstrokes or may be attributed to other causes. **Insect stings can result in any of the following symptoms:**

- Pain
- Redness
- Swelling (in area of sting and sometimes beyond)
- Flushing
- Hives
- Itching
- Anaphylaxis

Anaphylaxis

Anaphylaxis is the most serious reaction to allergens there is. Anaphylaxis is a life-threatening whole-body allergic reaction that can impair your breathing, cause a dramatic drop in your blood pressure, and affect your heart rate. Anaphylaxis requires immediate medical treatment, including an injection of epinephrine and a trip to a hospital emergency room. If it isn’t treated properly, anaphylaxis can be fatal.

Best Practices in Avoiding Insect Sting Allergic Reactions

Avoid stinging insects whenever possible. If you know you have severe reactions to insect stings do not complete work that puts you at great risk of being stung. Inspect work areas prior to completing any work to ensure there are no insect nests that could be disturbed. Wear long
sleeves and long pants in case of an insect attack. Have an EPI pen on hand in case of a sting and ensure your coworkers know where it is. If you suspect someone is suffering some type of serious allergic reaction immediately call 911, even if an EPI pen has been used.

**Discussion points:**

- Does anyone have an allergy to insect stings?

- Has anyone experienced someone suffering from a severe allergic reaction?
Involve the Right Person

There are times when you will not have what you need to complete a task safely and correctly. Whether it is the proper training, tools, knowledge, time, materials, support, equipment, etc., there is a lot you need in place to do any one work task correctly. It is important to take the time to get the right people involved depending on what you need to get your work done the right way.

Scenarios When to Involve Another Person

- You realize you were provided the wrong materials for a work task. It is necessary to stop and talk with a supervisor to get the correct materials to avoid any issues later on.
- You are alone but you need to lift a heavy and awkward object. Stop work and seek out an operator who can use a piece of equipment to lift it for you to eliminate the risk of a sprain injury entirely. If it is light enough, get another worker to help you lift it.
- Your company is working near another contractor and their work affects you and the work you are completing. Stop work and make sure there is clear and constant communication with the other contractor to ensure neither company’s work is negatively affected nor someone is put at risk of injury.

Other Considerations

Many employees do not want to slow down production or progress to ask a question to get the things they need to complete a job safely. Whether it is fear negative judgement from others or having too much pride, it is important to get passed that to be able to feel comfortable asking for help. It may take an extra few minutes to get someone else involved but it could save hours of lost production or an injury. Be an approachable person at work so others feel comfortable coming to you for help. When someone else is injured or production is lost due to a mistake, everyone loses. Work as a team to ensure everyone has what they need to successfully complete their assigned work tasks.

Summary

No one has all the answers. If you do, you are under paid and underutilized. The bottom line is we all need help from time to time. Take the time to do your work efficiently and safely. If that means stopping to involve the right person then do so.

Discussion point:

- Give some examples when you had to stop work to involve another person to get a job done.
It Won’t Happen to Me

There are many excuses someone will give for not working safely. Some common excuses include: I didn’t know, I didn’t have time, I lost my PPE, nothing will happen, etc. One of the worst excuses to have for not working safe is a “it won’t happen to me” mindset. This excuse communicates a mindset that is set on not completing a task safely or shows a person is relying on luck to keep safe while on the job.

Experience and Attitude Towards Workplace Safety

There is no substitute for experience. Experience, for the most part, allows us to work more efficiently and safely, however this is not always the case. Experience can also lead to complacency or a higher level of tolerance for risk. When an employee has done the same task or has been in the same occupation for many years they can have the “it won’t happen to me mindset”. This doesn’t mean that newer employees cannot have the same mindset, but it is often very experienced employees who fall into this mindset trap. We have all heard stories of experienced workers or supervisors getting seriously injured from becoming complacent towards known hazards. It is necessary to be mindful of your attitude towards safety on the job.

Why it is Necessary to Avoid This Mindset

Complacency can be hard to avoid, however having the mindset that an incident or injury will not happen can put you at a great risk of sustaining an injury. Believing you are not susceptible to the hazards of the job is a quick way to be injured. No one is able to avoid injury from the majority of hazards from just having experience alone. It takes action on top of that experience to ensure safeguards are in place and safe work practices are being followed to avoid injury. No matter how much experience you have, the necessary steps still need to be taken to prevent an incident from occurring.

Summary

Do not let experience on the job affect your attitude towards taking the correct steps to work safe. Hazards need to be controlled. They are only controlled when we as workers take the time to implement the proper safeguards and follow safe work practices. Evaluate your attitude towards safety as well as what hazards or work tasks you may have become complacent towards.
Ladders

Ladders are an essential tool on many jobsites and at home across the United States. Because of their wide spread use and the inherent danger of working at heights, they are responsible for a large number of injuries both on and off the job. The U.S. Consumer Product Safety Commission reports there are an average of 165,000 injuries at home every year and the CDC reported there was over 50,000 injuries on the job resulting from ladders in 2011.

Ladder Injury Facts and Statistics

- In 2011, 113 workers died while using a ladder.
- 43% of fatal falls on the job from 2001 to 2011 involved a ladder.
- According to the Bureau of Labor Statistics, 50% of all ladder-related injuries occurred when the individual was climbing with objects in their hands.
- Fractures are the most common type of ladder-related injury.

Common Causes of Ladder Falls

- **Misuses of ladders** - People often do not follow the safe work practices when using ladders. Standing on the top step of a ladder is a common and deadly practice. Other actions like climbing up a ladder carrying objects, leaning to reach for something, and attempting to move the ladder while still on it are some common practices that lead to injuries.
- **No inspection prior to use** - Problems such as cracked or broken rungs, loose bolts, non-approved fixes, etc. lead to injuries.
- **Not using the correct ladder** - People will often use the same ladder for many different jobs and situations. Choosing a ladder that is too short for the job is often a problem that leads to an injury. Also choosing a ladder not stable enough for the ground conditions or one that is not rated properly for the job are issues that can lead to injury.

Ladder Safe Work Practices

- Never stand on the top step if it is not designed to be a step.
- Do not lean or reach to grab something while on a ladder. Climb down and reposition the ladder closer to the object or area you were trying to reach.
- Do not carry objects up the ladder in your hands. Use a tool belt or a retrieval system to bring tools up to you once you have climbed the ladder. Always have your hands free when climbing so you are able to have three points of contact with the ladder.
- Always inspect a ladder before use. If there is any problems with it, immediately tag it out of use and find a properly functioning ladder.
• Use the correct ladder for the job. There are many types of ladders to work in different situations. Check weight ratings to ensure you do not overload the ladder during use.
• Always secure the ladder. Make sure the ladder is stable on the ground before climbing up. Tie off the ladder to the structure you are next to. Have someone hold the ladder to secure it.
Lifting and Rigging

Lifting and rigging work tasks are considered a high hazard task by many companies. There are a lot of associated hazards that accompany lifting any loads with cranes or equipment. It is important to not only understand proper rigging techniques, but also the other hazards that accompany this type of work task.

Lifting and Rigging Incidents

The first type of incident that comes to someone’s mind regarding lifting and rigging is some type of breakage of a sling, wire rope, or chain resulting in a dropped load. While these type of incidents usually have the most severe consequences, there are often many other types of less severe incidents that cause the majority of injuries or property damage. Some of the other injuries and incidents that occur are sprains, falls, crush injuries, electrocutions, and struck-by incidents just to name a few. Hazards such as swinging loads, manual handling of heavy rigging, holding on to tag lines, moving equipment, pinch points, working on elevated surfaces, trip hazards, slippery surfaces, etc. can all be present during lifting operations.

Safe Work Practices

• Anyone in a work area where a lift is being performed should be properly trained on the work scope, hazards, and mitigations of the task.
• Have a written lift plan. A lift plan ensures the desired rigging, angles of equipment, lifting capacities, etc. are thought about prior to the start of the lift.
• Plan the travel area and potential lines of fire prior to the lift. This helps to avoid striking other objects or having to moving objects or equipment after the load is already is in the air.
• Inspect all rigging prior to using it for a lift. Continuously check the integrity of the equipment throughout the day if there are multiple lifts.
• All rigging should be properly stored after lifting operations are complete. Proper storage helps prevent the rigging from being damaged.
• Keep away from the load. Always strive to tag lines or push sticks to ensure space from the load.

Summary

This is not an exhaustive list of all the hazards and safe work practices when completing lifting and rigging activities. Proper planning and forethought is important to eliminate hazards and avoid incidents. Be aware of the hazards that affect you and your coworkers on each unique lift that is completed.
Discussion point:

- What are other hazards when we are completing lifting and rigging activities onsite?
Manual Handling

There are many injuries on the job caused by individuals moving objects by hand. The Bureau of Labor Statistics reports that strains and sprains are the most prevalent type of injury on the job. While these types of injuries can be hard to prevent it is possible through taking the right steps. Many injuries are suffered due to individuals who are willing to take risks while completing lifts.

Types of Injuries Sustained While Completing Lifts

- Strains
- Sprains
- Repetitive motion injuries
- Pinch point injuries
- Struck-by injuries
- Slips, trips, falls

Best Practices for Manual Handling

The single best protection you can take from getting an injury while completing a lift is to eliminate lifting by hand! Elimination should always be the first consideration while discussing mitigating hazards on the job. Much of the manual handling on the job can be completely eliminated through proper planning, engineering controls, or use a piece of equipment to complete the lift. When setting up any job area or placing an object down, the next person who has to move the object should be thought of. If the object is awkward or heavy and there is no room for a piece of equipment to be able to lift it then someone will have to end up handling the object again. These situations can lead to injury. Properly plan out work tasks so that objects do not need to be repeatedly lifted and moved. Each time a lift is made there is chance for injury.

A best practice is to establish a weight limit of what one person or a team of people are allowed to lift and carry on a work site. Consider a cut-off weight before mechanical means need to be used to lift the object. For example some companies have the policy that no single person can lift an object heavier than 50lbs and a team of people cannot lift anything over 100lbs. While you may be able to handle these weights, it is good to have an established point where manual handling is no longer an option.

Summary

Injuries due to manual handling can be hard to prevent, that is why eliminating as many of these lifts as possible is important. Plan out your work tasks and your work areas to reduce the
chance of manual handling injuries. It is important to know your limits and not to exceed them. Even if you are strong it is easy to injure back muscles due to lifting awkward or heavy objects.

**Discussion point:**

- Are we taking unnecessary risks while lifting objects?
Mechanical Issue-Related Crashes

The roads can be an extremely dangerous place. According to the National Highway Traffic Safety Administration, there were an estimated 6.3 million police-reported car accidents in the United States in 2015. While many accidents are caused by distracted driving and driving under the influence, mechanical issues also lead to accidents.

While accidents caused primarily by mechanical issues represent a small percentage of all accidents the statistics are still significant enough to mention. There are many points of failure on vehicles, but there is only a few that represent the majority of mechanical failures that lead to accidents. The National Highway Transportation Safety Administration stated in a 2008 report that tire/wheel degradation or failure represented 43% of all mechanical issues resulting in crashes. Brake degradation or failure was second at 21% and steering/suspension/transmission failure represented 10.5% of mechanical issues that lead to accidents. Many of these mechanical issues can be avoided with proper inspections and preventative maintenance.

Vehicle Inspections

Vehicles could be realistically inspected prior to every time you drive them, however many people choose to go longer without inspecting their vehicle if at all. So many things outside of your immediate control can affect your vehicle that you do not know about. For example, any single trip can result in a nail or other object compromising your tire and causing a dangerous hazard for you the next time you drive your vehicle. Other issues such as wildlife, objects placed near your car, weather, etc. all can affect your vehicle whether or not you are driving it. A simple walk around of your car or truck prior to operation can avoid an accident. A few things to look for during a quick inspection:

- Look for low tire pressure. This could signal that you need air in the tire or a patch depending on the problem.
- Look for any bubbles in your tire. If there is a bubble in your tire this means you have a break in a belt in the tire and it is now compromised. It is recommended that you use your spare or get it replaced immediately before driving the vehicle again because the tire could give way at any time.
- Start the car and listen for any odd noises.
- Make sure there are no objects that you could strike pulling out from where you are parked.
- Pull forward and test the brakes before starting your trip.
Summary

While the majority of the time you will never any of the issues mentioned above, the one time you do it could result in a serious accident. Take mechanical issues seriously and when you find one during an inspection get it fixed by a professional to ensure the vehicle is safe to operate.
Medications

Use of prescription strength and over the counter medications is exceedingly common today. According to the Kaiser Family Foundation, over 4 billion prescriptions in 2016 were filled at retail pharmacies in the United States. Over the counter medication sales are also at high levels. According to a market research company called IRI, sales for over the counter medication were around $340 dollars per household in 2015. It is important to understand the effects medications and even supplements can have on you and the work that you do.

Side Effects of Medications

There are many different side effects a medication can have on the person taking it and they can vary widely from person to person. We have all heard the commercials selling certain medications and the long list of possible side effects that follow. It is important to understand the side effects that can come with the medications you are taking. Fatigue is an extremely common side effect for many different medicines today. Fatigue can create dangerous situations in the workplace. Fatigue is just one simple common side effect. There is an endless amount of side effects created by medications that can create hazardous conditions in a workplace.

Medications and Work

Often times companies or supervisors will not ask individuals about any type of medical related issues or concerns due to privacy laws. While individuals are not required to disclose every single medical issue or medication they are taking, they should talk with a supervisor when they can lead to problems in the workplace. For example, a worker is found passed out on a construction site. The worker is not responsive and an ambulance is called. It is found out later that the individual is diabetic and his sugar was low. While the supervisors may not have been able to prevent the incident, they may be able to provide better more accurate information to get proper treatment for the individual if they would of known they were diabetic.

Summary

Know the effects of medications before using them at work through speaking with your doctor as well beginning to take them outside of work. Speak up to someone such as a supervisor or safety representative when medications or medical issues can create issues for you at work. Knowing someone is dealing with certain issues can help management choose safer work options for the individual. Also they will have more information to get an individual the proper care in case of a medical emergency.
Motor Vehicle Safety- Loose Cargo

According to the National Highway Traffic Safety Administration, there were an estimated 6.3 million police-reported car accidents in the United States in 2015. Motor vehicle crashes are the leading cause of workplace injuries according to the Bureau of Labor Statistics. In 2013, motor vehicle incidents contributed to 40% of all workplace fatalities. The majority of injuries occur during the initial impact of a crash however loose cargo both inside or outside the vehicle, such as the bed of a truck, can cause additional injuries or property loss incidents.

Loose cargo within a vehicle or piece of heavy equipment such as empty bottles, trash, tools, PPE, etc. are not only a distraction while driving or operating, but they also turn into projectiles during a crash. A recent segment on Good Morning America looked at the dangers unsecured items in a vehicle can pose. Safety expert, Sean Kane of Safety Research and Strategies, told Good Morning America that ordinary objects in cars and trucks are responsible for 13,000 injuries each year. Those half-filled water bottles, canned goods, lab tops could all become dangerous projectiles when hurling through the air during collisions. At 55 miles per hour, a 20-pound object hits with 1,000 pounds of force — so powerful that a suitcase can literally shear the arm of a crash test dummy. It is just as important to mitigate the secondary hazards, such as loose cargo, as it is to do so for the more obvious primary hazard of the actual impact of a crash.

Mitigation Actions

- Practice good housekeeping. Remove any trash and unnecessary items from your vehicle or cab of a piece of heavy equipment.
- Utilize the trunk area or cargo boxes before putting items in the cab area of the vehicle.
- Tie down or secure any remaining items properly.
- Perform periodic inspections of any vehicles used both on and off the work site for loose cargo.

Discussion points:

- What items currently pose a hazard in your vehicle or piece of equipment?
- What can we do to make our vehicles safer when dealing with loose cargo?
Motor Vehicle Safety

According to the National Highway Traffic Safety Administration, there were an estimated 6.3 million police-reported car accidents in the United States in 2015. Motor vehicle crashes are the leading cause of workplace injuries according to the Bureau of Labor Statistics. In 2013, motor vehicle incidents contributed to 40% of all workplace fatalities.

Year after year, motor vehicle incidents are at the top of the list for cause of workplace fatalities. Off the job, they take tens of thousands of lives a year. Driving while off the job safely is just as important of driving safely while on the job. A serious car crash will affect your family emotionally as well as probably financially. Serious injuries sustained in a car crash will affect your ability to earn an income. Not only will your family be affected from a car crash off the job, but your company and coworkers will as well. Everyone has a role at work and when one person isn’t healthy or misses work, the company loses a valuable piece to that puzzle.

Safe Driving Tips:

- Do not engage in other activities while driving. Activities such as using cellphones, eating, or even just reaching for an item takes your eyes and focus off the road. A large majority of accidents are caused by distracted drivers.
- Be a defensive driver. Always leave yourself an out when driving. Think about your next move if an accident was to happen in front of you or a car ran the next stop light. Thinking ahead and being proactive when driving can save your life.
- Always wear your seatbelt. According to the National Highway Traffic Safety Administration, seat belts reduce serious crash-related injuries and deaths by about half.
- Maintain a clean and well-kept vehicle. Dirty windows and dust can be distracting and make it hard to see while driving. Loose cargo such as empty water bottles, tools, PPE, and other items are not only a distraction, but they can also interfere with controls in the vehicle.

Discussion points:

- How many people here have been involved in a car crash? Could it been avoided? How did it affect you or your family?
- How can we become better drivers both at work and outside of work?
Muddy Work Areas

Weather can create many hazards and slow down production for construction sites and other work sites that are outdoors. This is especially true when rain creates excessively muddy conditions. There are many different hazards to consider if work is going to take place in muddy conditions.

Hazards and Injuries Created by Muddy Work Areas

- Equipment/vehicle crashes or over turn. Traction and control is greatly reduced when operating on mud.
- Slips, trips, and falls. Walking around or getting into equipment in the mud can lead to slipping or falling.
- Sprains/strains. Many people will pull muscles due to getting their boots stuck in the mud and trying to yank them out. Also, falling over with your feet stuck in an awkward position can lead to suffering a sprain or strain injury.

Best Practices When Working in Mud

- The single best practice is eliminating work in excessively muddy areas until it clears up or work areas are addressed.
- Dress up areas with equipment such as a bulldozer to get down to more solid ground.
- If work is continuing in an area that is muddy stop when needed to dress it up again. It takes less time to fix an area to make it safer than it does to pull out stuck vehicles or equipment that tips over.
- Never drive into excessively muddy areas or down slick slopes. Getting stuck creates more hazards due to other personnel having to come into the field to pull out your vehicle or equipment.
- If you get your foot stuck in the mud, slowly work it out by moving your foot back and forth. Yanking on it is not very effective and can result in injury.
- Maintain clean steps on equipment and remove mud off of your boots before climbing up and down equipment. Always use three points of contact.

Summary

While these safeguards seem like common sense, many injuries and property damage incidents occur every year due to poor site conditions. Use your best judgement when working in the mud. Do not put yourself in a situation where you make a bad situation worse. Always adjust work plans to site conditions.
New Employees

New employees often are viewed as a liability to a company or jobsite when it comes to working safely. One study found that employees with less than one month on the job are three times more likely to suffer a lost time injury than employees with more than a year on the job. While new employees are at higher risk at getting injured, much of that depends on the other employees and the work site itself.

Benefits of New Employees

A new employee often wants to follow all the safety rules especially if the majority of people onsite are following the rules as well. If a new employee observes the other employees working safely they will often want to do the same. New employees also have a fresh set of eyes towards hazards onsite and may have experiences of unique lessons learned from previous jobs. That being said, measures should still be taken to ensure new employees are able to and do perform work safely.

Safeguards for New Employees

- **Training**- Even if a new employee has many years of experience on the job at another company they still need comprehensive training on their job at the new company, jobsite, and the company’s expectations.
- **Mentoring**- Many companies use some type of mentoring program to ensure that new employees have someone to ask questions and get guidance from. This allows for a new employee to be more comfortable approaching a more experience employee with any questions he or she might have.
- **Supervision**- Newer employees or even just employees on new tasks need to be supervised. Proper supervision may not necessarily mean an employee’s immediate supervisor. Depending on the task, a subject matter expert or a senior employee may be more beneficial for supervision of newer employees. Just like mentoring, a newer employee may feel more comfortable and get more out of being supervised by someone else other than their immediate supervisor.

Summary

While new employees can be a liability to a company, they also can serve as a great asset to everyone around them. The odds of a new employee avoiding an injury greatly depend on the other employees around them. Everyone starts somewhere and needs guidance in the beginning. Remember the struggles and important lessons learned as a new employee and pass that knowledge on. Safety on the job is everyone’s responsibility. Watch out for those around you and never hesitate to help out a new employee.
Discussion point:

-What is the biggest hazard for a new employee on this job?
New Equipment

Every single day new technologies and equipment are being introduced into the marketplace. These technologies and equipment eventually make it to our workplaces. It is important to fully understand these new tools before beginning work. Often new tasks and equipment are a source for injury on the job.

Before Using New Equipment

Depending on how complex the task or piece of equipment is that you are going to use will dictate what will need addressed before it is put into service. Here we will only discuss a few basic guidelines of what needs to happen before a new piece of equipment or process is put into place.

1. Involve a subject matter expert (SME). This person can be a rep from the supplier, someone who is familiar with the process within your company, or a consultant. Regardless of who it is, involving someone with the expertise on the new equipment before the decision is made to purchase or use it is crucial. Involving the SME before the equipment is purchased better ensures that all aspects of bringing in the new equipment have been thought of and if it will actually fit the needs of what it being brought into the workplace for.

2. Review all the relevant paperwork for the piece of equipment. Documentation such as the operator’s manual, safety guidelines, and technical sheet should be reviewed by everyone involved in the process. From this material and guidance from the subject matter expert, company specific job hazard analysis, job safety analysis, and/or standard operating procedures should be created.

3. Ensure that all of the other necessary resources in place to safely operate the equipment. Some other resources that could be needed is: additional training, other tools, other emergency equipment, maintenance equipment, additional personnel, more time to complete the task, shutdown schedules, etc. The list goes on and on depending how complex the new equipment is. The subject matter expert along with the other personnel involved in this process should be able to foresee these other needs and communicate them to the management during the onboarding process.

Other Considerations

The above steps may seem excessive for many new tools or tasks, however even new versions of equipment used onsite could benefit from the guidelines above. For example, it may not seem like a big deal to bring in new 2017 models of the CAT excavators you are already using onsite. However, if the model the company is using onsite now is from 2009 there can be a
major number of differences. Items like operational controls, safety controls, maintenance schedules, training requirements, new features, etc. can be vastly different than the model from eight years prior. Use the guidelines above to review the equipment before bringing it onsite and having your operators put the equipment to use. This could save a life from a safety standpoint and time and efficiency from an operations standpoint.

Summary

There are almost always secondary considerations that are not thought of when bringing in new equipment. Creating a thorough process for bringing in new equipment is a proactive approach that benefits everyone involved in many ways. The proper process will not only help to ensure injuries are prevented, but can also help to avoid costly mistakes from an operational standpoint.
Non-Routine Tasks

Many days we complete the same tasks at work, week after week. There are other times when we are required to do non-routine work tasks. Whether it is a task that is only done a few times a year, something that just comes up, or just lending a hand to another work group it is important to understand the unique hazards non-routine work tasks present.

Non-Routine Tasks Examples

Non-routine tasks can be defined in many different ways. Some examples of non-routine tasks include:

- Helping a different new work group out due to a lack of personnel
- Maintenance issues on equipment
- A completely new work task
- A task that only needs completed a few times a year

These are just four examples of different types of non-routine tasks that could occur in any workplace.

Routine Tasks and Complacency

The opposite of non-routine tasks are the tasks we complete every day. These tasks can become redundant to the individuals who do them every day. Because of this redundancy corners start to be cut. When corners are cut, safeguards are not put into place which can lead to an incident occurring. Complacency can be an issue for non-routine work tasks as well, however there are also additional hazards that may not be present in the normal day to day scope of work.

Hazards Associated with Non-Routine Tasks

The tasks that are not part of the normal scope of work for an individual present different hazards than they normally face. Individuals will still be exposed to many of the same hazards they normally are, but there are also unique hazards associated with non-routine work tasks. These hazards can include lack of experience for the task, insufficient training and knowledge, improper tools for the work, not enough personnel, poor hazard recognition, etc.
Best Practices for Completing Non-Routine Tasks

The complexity and type of task will dictate what needs to occur to ensure the work is completed in a safe manner. There are some best practices that apply to the majority of non-routine tasks.

• Ensure you fully understand the task and have the necessary training to be able to complete the task safely.
• Complete a thorough JSA with everyone involved in the task.
• Involve a supervisor or subject matter expert when discussing the work task as well as writing the JSA.
• Do not start the task if you lack any of the proper resources to complete it.

Discussion points:

- What are some examples of non-routine tasks at this worksite?
- What are steps we can take to ensure we are working safe while completing tasks we do not do often?
“Not My Problem”

We have all heard someone say in the workplace, “it is not my problem” or “that is not my job”. They may have been referring to a coworker not following rules, someone doing a task wrong, or a hazard left by someone in the work area. Regardless of what the circumstances are, all of these scenarios affect everyone in the company.

Why it is your Problem

No matter what the basic issue is, from someone not following safety rules or a hazard created by a coworker, it will affect you if an incident occurs. The ripple effect from an injury usually most greatly affects the individual’s family. However, it also will affect all of the workers in that workplace, the jobsite, and the company as a whole. This idea can sound extreme but we will look at the construction industry for example.

Injury Rates Affect All

Injury rates affect both how much a company has to pay for insurance as well as a company’s ability to bid work. Many larger companies will not allow a contractor to bid any work for them after they exceed a certain injury rate. Many companies use the a 1.0 experience modification rate (EMR) as a starting point for considering contractor’s bids. If a company’s EMR is over 1.0 this means they have had more than the average rate of injuries for their industry. If the company’s EMR is below 1.0 then it means they are doing better than their peers in preventing injuries which usually equates to being more competitive in being able bid new work.

If the company is not able to bid new work or even lose existing jobs due to having incidents and injuries then it will affect you or your coworkers. More immediate effects of an injury include loss of hours or job shutdown. After an injury occurs, even minor ones, many companies will stop work to complete an investigation. If the injury or incident is more serious then there can be a few days where work is stopped to complete a thorough investigation.

Summary

We took a selfish approach to why it is your problem when there is an unsafe condition or someone is working unsafe. You should want a safe workplace outside of your own good and interests for all involved. However, remembering that it does truly affect you and the company as a whole when something is not right will encourage you to own whatever the hazard is and see it through that it gets corrected. Keep this thought in your mind as you go into work today and share it with your coworkers.
Office Safety

Most of the efforts to make a company safer are put into what is considered high hazard work. For example in a construction setting, the majority of energy is almost always focused towards keeping the workers in the field safe. While it is very important to address the hazards and safety in the field, there is still a need for a safety for those workers in offices in the company. There are tens of thousands of injuries sustained by office workers every year according to the Bureau of Labor Statistics. This number is significant and safety in the office should be taken seriously.

Common Office Injuries

- Falls are the most common type of office injury. Office workers are 2 to 2.5 times more likely to suffer a disabling injury from a fall than non-office workers. Tripping over clutter or an open file drawer are some reasons office workers sustain injuries from a fall.
- Strains and sprains due to lifting objects also occur often in the office. Office workers are usually not trained on proper lifting techniques to use when moving objects. Lifting awkward or heavy objects alone also leads to injuries.
- Ergonomic-related injuries are common in an office setting. A work area that is not set up correctly to fit the user can lead to ergonomic injuries and issues over time.

Safe Work Practices for the Office

- Maintain a clean and tidy work area. Never leave objects on the floor or in the area where you or other can trip over them. Always make sure file drawers are closed immediately after you open them.
- Eliminate the amount of awkward or heavy lifts around the office. If you have a heavy box, set it down on a table instead of the ground. This saves you or someone else from having to bend down to pick it. When you have to lift an object, use the buddy system if it is a heavy or awkward load. Always use proper lifting techniques.
- Set up your office work area to fit your body. Every piece of your office should be adjusted to fit you specifically. Pick a chair that is adjusts to where your thighs are parallel to the floor, feet are on the ground, and lower back is supported. Have your desk at a height where your arms make a 90 degree angle and your wrists are straight. Have a document holder or a second computer screen to avoid looking down and back up to copy information into another document.

Discussion points:

-What can we do to make our office(s) safer?
Our Reactions to Our World

Each of us have our own way of perceiving and viewing the life we have. Our experiences have shaped our perspective which affects the way we view events and how we interact with the world around us. Having an understanding of this idea of perspective relating to our reactions is important to be able to control our reactions and make positive choices when faced with difficult situations.

Reactions to Customers and Coworkers

Many of us spend more time of our time that we are awake at work than we do at home. Because of this, there can be many issues between people at work. Perception of others and their actions dictates how we react to them—good or bad. When we judge others based on looks, actions, or a single event and associate that individual with a specific negative thing it can lead to issues. When we perceive someone in a negative fashion we react to them in a reduced capacity or in a jaded way altogether. For example, you have been working with Bob for 4 years and overall have enjoyed working with him. One day you two get in a heated debate over a political candidate in the upcoming election. Ever since the debate you two have had short guarded discussions. These types of events between people happen every single day and relationships are forever changed in a negative manner. This does not have to be the case if we choose to look past it and react to the other individual in a more positive manner. Being able overcome these situations lead to a healthier and more productive work environment.

Reactions to Negative Events

There is always going to be bad things happening in our lives at different points in time. Whether it is at home or at work, this fact of life is inevitable. How we react to these negative events will have a great deal of impact on whether it will be something that continues to negatively affect us or can be used to improve ourselves in some fashion. When bad things occur on the job it is important to take a step back and be self-aware of how the event is affecting your focus, mood, thoughts, communication with others, and your job performance. The fact of the matter is, the event happened and it is now over. You need to decide if you are going to continue to dwell on it and let it have control over you or learn from it and move on. If you realize that 99% of bad events are learning lessons and flip it into a positive, you will become a much stronger and able individual.

Summary

Having a positive reaction or outlook towards negative people or events is needed in order to maintain a healthy mental state. Sure some events and actions of others need to be dealt with in a serious manner, but all individuals need to move on to ensure that their reactions are not
continually negative towards the stimulus. We cannot control everything that occurs in our lives, but we can control our reactions to it all.
Pinch Points and Hand Injuries

We use our hands for virtually all work tasks that we do. Because of how often we use our hands, they are often in the line of fire where they can be injured. Hand injuries are the second leading type of injury on the job in the United States. Pinch points are a leading cause of both minor and serious injuries to the fingers and hands.

Pinch Points

A pinch point is defined as any point where it is possible for a body part to be caught between moving and stationary portions of equipment. Pinch points are found in many places throughout a workplace. Tasks such as equipment maintenance, lifting materials, assembly line work, and hooking up trailers are just a few common tasks where pinch points are a common hazard.

Safeguards to Avoid Pinch Points

- Eliminate the hazard by ensure proper guarding is in place or keeping your hands away from pinch point altogether.
- Pay attention to where your hands are around any moving parts or any objects that have the potential to move.
- Do not place your hands where you cannot see them.
- Wear proper fitting gloves to ensure they do not get caught in rotating parts and pull your hand into a pinch point.
- When working on equipment or machinery ensure they are properly locked out and tagged out to prevent unexpected start up.
- Properly block any equipment or parts where stored energy could be released.
- When working with others make sure to communicate to let each other know if you are out of the line of fire before moving objects or starting up equipment.

Summary

Often times it is not the obvious pinch points that injure a person such as a conveyor belt or a piece of moving machinery. Many times tasks as simple as shutting a truck door will end up in a pinch point injury due to a person not paying attention to where their hands are. It is important to not get complacent and monitor where your hands are when you complete any task.

Discussion point: What are some pinch point hazards onsite?
Poison Ivy

Poison ivy is extremely common in the United States. The only geographical areas it is not found in is Alaska, Hawaii, and parts of the west coast. It is one of the most common triggers for rashes every year for both kids and adults who spend time outdoors. For some people, poison ivy does not affect them at all. On the other hand, many people are severely allergic to the plant and can end up in the hospital if they are not careful. It is important to know what poison ivy looks like and how to avoid getting a rash from the plant.

Poison Ivy Characteristics
(source: www.webmd.com)

- It has three pointed leaves
- The leaves can be shiny
- The leaves can change colors depending on the time of the year- reddish in the spring, green in the summer, and yellow or red in the fall
- It is able to grow as a vine or bush

Poison Ivy Rash Care

- Use a cold compress, calamine lotion, non-prescription hydrocortisone cream, or an antihistamine to ease itching.
- Call your doctor if the rash is near your eyes or covers a large part of your body.
- Get emergency medical help or call 911 if you have a severe reaction.

The severity and characteristics for a rash from poison ivy may vary from person to person. The worst symptoms are often seen during days 4 to 7 after coming in contact with the plant. The rash may last for 1 to 3 weeks.

Safety Tips

- Stay out of areas where you know poison ivy can be.
- Wear long pants, shirt, boots, and gloves when entering any area where poison ivy can be. The less skin exposed the better.
- If exposed, wash the skin as soon as possible. If you get most of the oils off quickly it will help to limit the rash.
- Wash any items or tools that may have been in contact with poison ivy. The oils of the plant can remain on the objects for long periods of time and you can indirectly get a rash this way.
- Never burn poison ivy to get rid of it. The burning plant can still release oils that could result in a widespread rash for anyone near the fire.
Pressure Washing

There are many different types of injuries that can occur while using a pressure washer. According to the Consumer Product Safety Commission, an estimated 6,057 people went to an emergency room with injuries related to pressure washer use in 2014. While the pressure of the water can be considered the biggest exposure to risk during this work task, there are certainly many more hazards to be considered.

Hazards and Injuries Associated With Pressure Washing

- Hose / connection failure
- Flying debris
- Strains / sprains
- Burns
- Slips, trips, falls
- Lacerations / bruises

Safeguards to Prevent Pressure Washing Injuries

- Set up your work area where other people are not in the line of fire of the water stream or flying debris.
- Use a longer wand that makes it hard for the individual who is using the pressure washer to make contact with their own body. However weigh the pros and cons of using a longer wand if the task is being done over a long period of time which may lead to repetitive stress or sprain injuries.
- When using a pressure washer that is also supplied with heat, do not turn it all the way up. Using heat can be more effective to remove debris; however it also creates the opportunity for a burn.
- Maintain good housekeeping. Keep the area free of trip hazards. Remove excess mud to prevent slip injuries.
- Wear the proper PPE. Depending on what is being cleaned and the power of the pressure washer will dictate what exact PPE is needed. A good start is rain gear, safety toe boots, gloves, safety glasses, and face shield.
- Never use a pressure washer to spray off yourself or your boots.
- Never use zero tips. These tips are usually painted red. Choose a tip with a wider angle of spray to reduce the chance of a severe injury if the stream makes contact with the body.
Summary

Consider all of the risks of pressure washing and what steps you need to take to protect yourself and the others around you. While the main hazard considered is the pressure of the water, there are many more secondary hazards that could lead to an injury. What are some additional safeguards or PPE you can choose to use to help prevent an injury while using a pressure washer at home or work?
Proactive vs Reactive Safety Approach

Many of the safety rules and procedures that are in place were “written in blood”, meaning they came about from a previous incident that caused an injury, property loss incident, or a fatality. When we implement a safeguard after an incident occurs we are taking a reactive approach to safety. We can look at the majority of rules and procedures that we follow today as a proactive approach towards safety, however many of them came from a reactive position. Something bad had to happen first before many of the rules and procedures were put into place.

Being proactive is the best way to approach safety in the workplace. Addressing and eliminating hazards before work begins should be a main goal of a company’s safety program. Many workers or the management in some companies would rather take a reactive approach with some hazards rather than being proactive and eliminating them up front. This mindset puts everyone onsite and the company as a whole at risk for an incident or injury.

Proactive Versus Reactive Example

An operator is on an excavator in an already tight work area. A crew that has a work task next to him decides to park in his work area. The crew is not aware of the scope of work for the operator’s task and that is why they did not recognize the hazard of parking there. This makes his job even more difficult to complete. Instead of the operator asking the crew to move their vehicles to a safer location or contact his supervisor he decides he can probably squeeze by the vehicles to complete his work. Ten minutes later he turns his excavator around and in the process hits two of the crew’s vehicles with his counterweight.

If he were to took a proactive approach towards the hazard of the vehicles in his work area this incident would not have happened. He could have stopped his work and asked the crew to move their vehicles to eliminate the hazard of hitting them. This small decision could have made a big difference. Instead, there will be a site shutdown to complete an incident investigation. The investigation takes time and money to complete. There will be a large cost to fix the vehicles. Individuals could be written up in result of the incident. New procedures and rules will be implemented to prevent a similar incident from occurring.

Being proactive sometimes takes time to do successfully. To eliminate some hazards it takes thought and planning to do correctly. Other times, like in the example, a two minute conversation to move the vehicle could save hours of downtime, money, and stress for everyone involved.
Discussion points:

- Think of an example of a hazard onsite and get example on how to handle it proactively and reactively.

- Ask the crew what are some proactive steps they are going to take today for the work they are completing that day.
Ready for Work

Coming into work healthy and in the right mindset every day is just as important as being properly trained or having the right tool for the job. Many factors, both on and off the job, affect how well or poorly we do our jobs on any given day. Some of the factors we will discuss are sickness, fatigue, medication, and stress.

- **Sickness** - We all get sick from time to time. Some illnesses are minor and work can continue, but others we need to stay home to get better before coming to work. When you are sick you may not be able to perform your duties as needed and this can put yourself or others at risk for an injury. Know when it is time to stay home due to an illness. During flu season especially, it is important that you do not come to work and infect others. Not only are you not able to work to your fullest ability you also affect others being able to work due to being infected with your illness.

- **Fatigue** - Fatigue is a killer on jobsites all across the country. Many employees work over the normal 40 hours a week. Add on the demands of home life and there are many people who are probably too tired to safely perform their functions. Get at least six hours of sleep a night and eat a balanced diet to help combat the demands of a busy life. Drink caffeinated drinks or take a break and stretch when feeling tired on the job.

- **Medication** - Many medications affect how we feel. When starting a new medication it is important to try it off the job to see how it affects you. Ask your doctor about all of the side effects. Make sure he or she understands the work you do as well as any other medications you take. Let a supervisor know if you are not feeling well due to a medication. If you feel comfortable telling a coworker about what medication you are taking, let him or her know so they can keep an eye on you.

- **Stress** - There is good stress as well as bad stress. We are more familiar with the bad stress. Stress from work demands, home demands, family problems, health problems, etc. affect us every day. A combination of high expectations for productivity and limited resources to complete work often leads to high stress levels on the job. It is important to be able to handle stress in a constructive way. Exercising or taking time to enjoy hobbies is a good way to relieve stress. Recognize when you are stressed and step away from the situation to take time to relax.

**Summary**

Whether it is sickness, fatigue, medication, or stress affecting you in a negative manner at work it is important to speak up and address the problem. When “simple fixes” are not enough to correct a health related issue it is important to let a supervisor know and cease the work task. Address the problem at its source to ensure you can continue to work productively and safely.
Safety Can Be Redundant

Some individuals like to reflect back on the “old days when there was no safety” to protest the ever increasing emphasis on workplace safety. Over the last few decades many changes have come into play regarding workplace safety. Whether it is through new technologies, new laws, new rules, or just more focus given to safety, those in the same job for years have experienced a major shift towards more of an emphasis on safety than the years before.

Why Safety Can Be Redundant

Often times the same work tasks are completed every single day. Because of this, the safety issues and focuses are often the same- day in and day out. The discussions on safety will often focus on a handful of hazards for the work going on that day. The reason for this is because the same hazards often are the ones that cause the most incidents and injuries. While discussing and focusing on the same old hazards can get redundant, it is important to never become complacent towards these hazards.

Battling Complacency

We do many of the tasks in the same exact way every single day. Yet paperwork is still filled out and discussions are still had regarding safety for these tasks. One of the hardest things to avoid at work is complacency with hazards as well as going through the motions with safety procedures. As time goes on, individuals become more confident in their abilities and knowledge at work and some people are willing to take more risks. This is one reason why safety issues need to be constantly reinforced, even if it has become redundant to talk about them.

Summary

It is understood that safety can be redundant at times, but it needs to be understood by employees that we all need reminded to stay focused on working safely. The same old hazards are often the ones that get people injured. OSHA’s Fatal Four construction hazards are an example of this. It is known that falls, electrocutions, struck-bys, and caught in or between incidents are the main causes for the overwhelming majority of fatalities in the construction industry yet it reoccurs year after year. Do not get complacent with the hazards of your work and do not view some redundancy in a safety program as a negative.
Safety Related Paperwork

Safety is often associated with paperwork in many workplaces. While many employees dislike the fact that there is so much paperwork involved in workplace safety, it is often necessary to have. Paperwork communicates safety requirements, describes work processes, communicates hazards, tracks near misses, investigates losses, and serves many more purposes. It is an important part of the overall safety program at a company.

Paperwork as a Proactive Tool

Whether you agree or disagree with the paperwork that the company requires you to review or complete relating to safety on the job, each piece is there for a reason. There are many proactive tools such as training materials, job safety analyses, PPE assessments, standard operating procedures, permits, etc. These tools are meant to communicate the hazards and necessary measures needed to work safely for a specific work task or at a work site as a whole. These tools also get employees to take a step back and focus on safety first rather than just jumping into a work task. The paperwork serves as a tool to double check that the necessary safeguards are in place prior to work beginning. Work tasks can be complicated and these tools are just a way to ensure hazards are communicated and addressed.

Paperwork is Required to Track Safety Performance

Paperwork is an important part in tracking and measuring safety performance in the workplace. A quote often used in business is “what gets measured gets managed”. This is especially true when it comes to workplace safety. When events occur such as near misses, property damage events, spills, injuries, and other incidents, it is important that they are reported and tracked. By reporting these incidents, a company can begin to collect data and see what the trends are that cause the different incidents. Steps can be taken to improve safety at a company using this data to make informed decisions in implementing effective safeguards. The paperwork completed for incidents such as investigation reports help find the root cause of the incident so steps can be taken to prevent it from happening again at the worksite. The findings from the investigation process are often shared companywide to also prevent it from happening at the other worksites or locations the company has.

Summary

There are many other reasons why paperwork is necessary regarding workplace safety. Other very important reasons include complying with client requirements as well as federal regulations such as the EPA or OSHA. Do not just go through the motions and pencil whip paperwork. Take time to understand the purpose of these tools at your workplace. It not only keeps you safe, but it also protects the company as a whole.
Seatbelts

Everyone has heard that seatbelts saves lives, but not everyone wears their seatbelt. Studies show about 1 in every 7 people do not wear their seatbelt. There are many reasons why people do not wear seatbelts, but the facts are that they save lives.

Excuses Why People Do Not Wear Seatbelts

- It is “not cool”- Teenagers are the least likely age group to wear their seatbelts. Educate the teenagers in your family on seatbelt use. Males are also 10% less likely to wear their seatbelts compared to females.
- They are uncomfortable. If it is to a point that it is uncomfortable for you to wear look into buying an aftermarket pad to put on your seatbelt.
- The myth “it is more dangerous to wear seatbelts than not to”. The research shows that this is not the case. Search on YouTube “Man Does Not Wear Seatbelt” to see what it looks like when a person rolls a vehicle and does not have their seatbelt on.

Why You Should Wear Your Seatbelt

According to the CDC, seatbelts reduce crash related injuries and deaths by half. In 2014, seatbelts saved an estimated 12,802 lives. Individuals who do not wear their seatbelt are more likely to be ejected from the vehicle in a crash. Seatbelts serve as a restraint for passengers in a vehicle. They restrain an individual to the seat instead of being ejected from the vehicle or being thrown around the interior of a vehicle in the instance of a crash. While airbags serve as great protection during a crash they do not offer the best protection alone. Air bags combined with proper seatbelt usage offers passengers the best odds of surviving an automobile crash.

Summary

Seatbelts need to be worn every time you are in a vehicle. Reasons such as being uncomfortable or “not cool” are not good enough for not wearing a seat belt. As the driver, you are responsible for everyone in your vehicle. Require anyone riding in your vehicle to wear their seatbelt. Educate others who do not wear their seatbelts.

Discussion point:

-What are some of the other reasons people give for not wearing their seatbelt?
-Do you know someone who has been severely injured or died from result of not wearing their seatbelt?
Securing a Construction Site

There are many instances where the public make their way into a work site to run equipment for the thrill of it. Some other reasons such as theft, vandalism, curiosity, or even accidental entry are cause for people to enter a work site after hours. No matter what the intention of the people entering, it is important to have a secure workplace, especially after hours. Securing the workplace means taking steps such as locking up areas, shut down equipment, placing barricades, posting signage, and protecting property.

Safeguards to a More Secure Workplace

General Work Area- Ensure adequate fencing is up around the entire work site. Depending on the area, crime rate, and potential property loss evaluate the possibility of investing in a site wide security system or outside agency to provide site security. Keep valuable items out of plain sight from the viewpoint of the public. Pay attention to where scrap metal piles may be onsite. Scrap metal often brings thieves into a work site.

Buildings- Always lock buildings. Keep valuables out of sight within the buildings. If someone looks through a window and does not see anything worth taking it may deter them from entering. Use alarms, flood lights, and cameras when possible. While the upfront cost can be expensive, a good security system can prevent expensive break-ins.

Heavy Equipment- There has been many instances where people break into a construction site and run equipment for the thrill of it or to cause problems for the company. This can do a lot of damage to the site as well as be a dangerous situation for the people who broke in. It is important to take steps to protect against situations where heavy equipment is stolen. Some steps to take:

- Do not leave equipment out in the open when possible. Lock equipment in a shop or at least in a fenced in area.
- Remove key from the equipment and lock the doors. Do not rely on the fence around the site to keep people out.
- Most pieces of equipment have a master switch. At the end of your shift shut the master switch off. If someone is not familiar with that piece of equipment they will not be able to get it to turn on.

Excavations- All excavations should be 100% barricaded or fenced in at the end of the day. This protects the public or any employees who enter the area from driving or falling into the excavation. Do not rely on a perimeter fence to protect individuals from harm due to an exposed hole within the site’s boundaries.
Discussion point:

-The points made in this talk did not cover every aspect of securing a work site. How else can we more effectively secure our worksite?
Self-Awareness and Safety

Gary Vaynerchuk, a successful serial entrepreneur, repeatedly states that self-awareness is the most important tool to anyone’s success. Knowing who you are, your strengths, your weaknesses, and why you do the things that you do is critical to your success in any part of life. Self-awareness plays an important role in your success at work including working safe while on the job.

What is Self-Awareness?

Self-awareness is defined by Google as “conscious knowledge of one's own character, feelings, motives, and desires.” There are many aspects and parts of self-awareness but it basically boils down to knowing who you are and what you want. Self-awareness is important for the success in all areas of our lives.

Awareness Versus Action

Even if you are aware of who you are, your strengths, your weaknesses, etc. it is useless unless you apply action towards what you could improve at. Improving at the things you know you need to improve at is as important as knowing what those things are. Knowledge without action is meaningless.

Self-Awareness and Safety

How is self-awareness related to safety? There are many ways self-awareness applies to workplace safety.

1. Knowing your strengths can help others. When you are confident in your experience and training you can be a leader to others in the workplace regardless if you are in a management role or not. Being self-aware allows you to know when you can provide value to others around you at work and when you need to just sit back and let someone who has the knowledge or skills to lead a work task.

2. As an employee knowing and recognizing your limitations may be more important than knowing your strengths. Being able to recognize when you are not able to do something or know the answer is important. Being able to drop your ego and get help when needed is very critical to having a safe workplace. When individuals do not recognize their weaknesses or do not seek assistance when needed, it can create an opportunity for injury to occur.

3. Being self-aware is also important for our relationships with the other employees at the worksite. Being able to get along with coworkers is very important for everyone to successfully work safe. When relationships between employees are weak,
communication and trust is limited thus reducing the effectiveness of a safety program. Self-awareness allows an individual to recognize how to more effectively communicate with those people around them.

Summary

Self-awareness and workplace safety do not often get connected, but they are important to one another for a worksite to have individuals that can work together safely. Self-aware individuals know their strengths and weaknesses and use this knowledge to become better people. When the individuals in a company strive to be better people, the measures taken for safety on the job are more effective.
Shift Work Dangers

There are many occupations that require shift work in order to continue business operations. According to the Bureau of Labor Statistics, approximately 15 million Americans work a job that requires some type of shift work. While some individuals choose to work different shifts such as the night shift, there are many people who do so because they need to. It is important for anyone who is working these shifts to understand the hazards associated with it.

Disruption of Circadian Rhythm

The main hazard of shift work is that it disrupts a person’s circadian rhythm. Psychology Today describes circadian rhythm as follows: “Often referred to the "body clock", the circadian rhythm is a cycle that tells our bodies when to sleep, rise, eat--regulating many physiological processes.” This rhythm is important because it regulates many of our physiological processes and when it is disrupted there can be many negative health effects. A study completed at Rockefeller University found that mice that had their circadian rhythm disrupted experienced weight gain, impulsivity, slower thinking, and other physiological and behavioral changes. So much research has been linked negative health effects to shift work that the International Agency on the Research of Cancer listed shift work as “probably carcinogen to humans” in 2007.

Hazards Created by Shift Work on the Job

Not only are there hazards to your health due to shift work, but there are also hazards in the workplace for individuals on these shifts. Some of the hazards created by shift work are:

- Inability to focus- less focus can lead to mistakes and thus injuries occurring on the job.
- Fatigue is a major issue in the workplace for workers who work regular hours. Those working shift work are put at even higher risks for fatigue related incidents.
- In some industries, there can be an increase likelihood of workplace violence at night (i.e. robberies).
- Increased stress levels due to not seeing family or health issues can lead to decreased job performance.

Summary

We all have to make a living and provide for our families, but if you have to do shift work it is important to understand the hazards. There are steps you can take to combat some of the negative effects of shift work. One step is to try to keep on the same shift and maintain the same sleep/awake cycle. Another step is to eat right and drink plenty of water to aid your body
in its physiological processes. Talk with a doctor or sleep specialist to discuss other options to limit the negative effects of shift work.
Shortcuts: The Acrobat and the Safety Net

Taking short cuts during a work task is one of the hardest things to prevent workers from doing on the job. Short cuts, no matter how small they may seem, can eventually lead to an incident. On any jobsite there can be a lot of procedural or safety-related rules. These procedures and rules serve to protect life and property. Every rule and procedure is in place for a reason.

The Safety Net and the Acrobat

To create a visual of what effects short cuts have on safety in the workplace, we can compare them to cutting holes in a safety net and a possible incident as an acrobat falling. When a safety procedure is not followed for the sake of making the work task quicker or easier, we begin to put “holes” in our safety net. Think of each rule or safeguard that is supposed to be in place as a strong area of netting. Each time we take a short cut and do not put a safeguard into place, we comprise the net. As more safeguards are not put into place or comprised by a short cut we continue to comprise the net as a whole. If an incident occurs, in our example- the acrobat falling towards the net, without those safeguards in place the net breaks and the effects are catastrophic instead of minimal.

Real World Example in the Workplace

In a real world example, we will use a man working in an aerial lift. The example company’s main safety procedures for this task are to do a workplace inspection of the area, wear fall arrest equipment, and to have a spotter at all times. The two men assigned to the task, the operator and spotter, had a late start to the day and decide to not inspect the work area before they start the task. The operator checks his harness, finds no defects, and puts it on. The operator climbs into the lift and clips his lanyard into the appropriate anchor point. Ten minutes into the task the spotter decides he does not have to be there the whole time and lets the operator know he is going to work inside the shop while the aerial lift work is done. The operator acknowledges and continues on with his work. The operator moves the aerial lift and hits a pot hole in the pavement and it throws him over the side of the lift. He is knocked unconscious and no one heard the crash. The operator is saved from falling to the ground because of the harness and lanyard; however he suffers from suspension trauma and dies an hour later.

Real World Example Overview

Out of the three main safety procedures that served as safeguards, only one was put into place, which was the fall arrest equipment. The workplace inspection should have been completed prior to the start of work, but was not due to the workers starting late. If they would have spent the five minutes doing the workplace inspection they would of probably noticed the large
pothole in the pavement, which could have avoided the entire situation. This created the first weak spot in our imaginary safety net. The other safeguard that was affected by a shortcut was the spotter leaving to attend to another task to save time in his day. If the spotter was watching the aerial lift work and saw the pothole before the lift hit it he could have saved the operator. Even if the lift still struck the hole when the spotter was there he could of notified emergency personnel and probably saved the operator’s life before it was too late.

We take shortcuts because we have the “it will never happen to me” mindset with many of the tasks we do often. Just like us taking shortcuts- most times the acrobat stays on the line, never falls, and never needs the safety net. However one day he does fall, but since the net is comprised it is not there to save him. Take every safeguard seriously. Every safeguard is one more strong point in our net that a potential incident has to break through to cause an injury.

**Discussion points:**

-What are common shortcuts in our line of work?

-How do we avoid taking shortcuts here on our site?
Sleep

The importance of adequate sleep cannot be overstated. Sleep has many effects on a variety of aspects of our health. The way you feel awake has a link to what kind of sleep you get at night. Poor sleeping habits can lead to an acute sudden incident such as a car crash due to a tired driver or chronic problems over the long term such as a number of health issues.

Research has shown up to 40% of Americans are sleep deprived. This causes many issues in the workplace and at home while completing tasks. For example, driver sleepiness is a factor in about 100,000 car accidents each year, resulting in about 1,500 deaths. Studies have also shown that sleep deprivation can significantly reduce workers’ reaction time, motor control, decision-making ability and situational awareness. This creates an unsafe condition where a worker, or a whole jobsite, is exposed to a potential incident that could cause injury.

Sleep and Your Health
(source: nih.gov)

• Sleep affects your ability to learn and remember new information.
• Sleep affects your ability to pay attention.
• Sleep affects your heart and cardiovascular system. There is a link between long-term sleep deficiencies and heart disease.
• Sleep affects how your body reacts to insulin. Sleep deficiency leads to higher blood sugar levels; leaving you at a higher chance to be diagnosed with diabetes.

Tips to be Well Rested

• Get at least seven hours of sleep. Studies vary on exactly how much sleep we need but the consensus is between six and eight hours.
• Shut your TV off and place your phone face down. Blue light and other light sources can disrupt your sleep.
• Avoid naps during the day. Naps can throw off your internal clock for rest at night. If napping is a must during the day keep it under 20 minutes.
• Keep your room between 68 and 72 degrees Fahrenheit. This is the range that is best for sleeping conditions for most people.
• Go to bed and wake up at the same time every night. This keeps your internal clock on track and your body gets into a routine.

Discussion point:

- Have you ever experienced a time where you did not remember driving down the road? How could a situation like that affect our work if it were to happen here?
Slips

Slips, trips, and falls are one of the leading causes of injuries and fatalities in the workplace. According to OSHA, slip, trip, and fall incidents cause 15% of all accidental deaths, and are second only to motor vehicle incidents as a cause of fatalities on the job. According to the 2006 Liberty Mutual Workplace Safety Index, the annual direct cost of disabling occupational injuries due to slips, trips and falls is estimated to exceed $11 billion.

Slips

While slips do not cause as serious injuries or the number of fatalities falls do, they are responsible for a large number of costly injuries every year. Addressing the hazards that cause slip incidents should be a focus in the workplace. Slips happen when there is too little friction or traction between the footwear and the walking surface. Common causes of slips are:

- Wet or oily surfaces
- Spills
- Poor weather conditions
- Loose, unanchored rugs or mats
- Flooring or other walking surfaces that do not have same degree of traction in all areas

Slip Prevention

Good housekeeping is a basic step in preventing slips in the workplace. Keeping walkways and paths clear of water, snow, ice, oils, etc. is important in preventing slippery conditions that lead to injuries. When considering housekeeping also look for floor mats or other materials that could create a slip hazard. Objects such as pieces of cardboard or wood can cause a person to lose their balance due to the object moving when stepped on. Another important consideration is proper footwear. Footwear with good tread makes better contact with the walking surface which leads to less of a chance of a fall. When there is slippery conditions present that you cannot avoid take smaller steps or shuffle your feet. Taking larger steps can lead to your balance being thrown off resulting in a slip.

Summary

Slip incidents are hard to avoid if there are slippery conditions or other hazards present that cause slips. The key is to eliminate these hazards so individuals are not exposed to them in the first place. If there are no conditions where there is too little friction or traction between an individual’s footwear and the walking surface then there is no slip.

Discussion point: What are some hazards that can cause slip incidents in our workplace?
Slips, Trips, and Falls

Slips, trips, and falls are one of the leading causes of injuries and fatalities in the workplace. According to OSHA, slip, trip, and fall incidents cause 15% of all accidental deaths, and are second only to motor vehicles as a cause of fatalities on the job. According to the 2006 Liberty Mutual Workplace Safety Index, the annual direct cost of disabling occupational injuries due to slips, trips and falls is estimated to exceed $11 billion.

Common Slip, Trip, and Fall Incidents

- Falls from elevation are often deadly or result in serious injury and may include falls from ladders, falls off of mobile equipment, falls from roofs or other elevated structures, etc.
- Slip incidents on slippery surfaces such as snow and ice are common in colder geographical areas in the U.S. Wet floors due to moisture or chemicals are also common causes of slip incidents at work.
- Trips can be caused by a multitude of reasons including poor housekeeping, changes in elevation, improper footwear, etc.

Mitigations for Slip, Trip, and Fall Incidents

- Always use fall prevention or protection for work over 4ft in general industry work and 6ft in the construction industry. Protect workers by using proper guarding of any holes or open windows and use guardrails to prevent falls. Where guardrails are not feasible, use proper fall protection. An example of proper fall protection is a full body harness and a self-retracting lanyard.
- Proper housekeeping is very important in preventing slip, trip, and falls incidents. Objects on the ground create a hazard for anyone walking or working in the area. Maintain clearly defined paths for walking in the work area. Have lay down yards for tools and equipment out of the way of employee foot traffic. Address any wet, slippery, or icy walking surfaces in your work area. Post signs of any hazardous surfaces until the situation is taken care of completely.
- When climbing up or down a portable or fixed ladder ensure that you use proper techniques such as using three points of contact and keeping your belt buckle within the sides of the ladder. Do not lean to reach objects- this can throw off your balance and you could fall.

Discussion points:

-Are there trip hazards due to improperly placed objects in your work area?
SORT Your Way to a Safer Work Environment

There is an endless amount of acronyms when talking about safety. The acronym S.O.R.T. is a tool that can help remind us to take steps to address hazards and create a safe work environment. S.O.R.T stands for Stop, Observe, Recognize, and Take Ownership.

Stop- It is necessary to take time not only at the beginning of the work shift to evaluate both the work area and equipment for hazards, but also as conditions change. When we are rushed we miss the small details that matter. Always take the time before a task begins to evaluate the work task you are about to do. Anytime conditions change or things are not going as planned, stop work and evaluate what needs done to correct the situation.

Observe- Take time to look at the environment around you. How are weather conditions, lighting, and temperature at the work area? Are the needed personnel and tools in the work area ready to go? Has all equipment been thoroughly inspected prior to starting the work task? Has all necessary paperwork such as SOPs, JSAs, or permits been reviewed and completed?

Recognize- Once you have stopped and observed the work area what hazards do you see? Your ability to recognize hazards comes down to utilizing training, safety meetings, company policies, lessons learned, safety shares, and past experiences. Much time is spent in discussing and training everyone onsite to be able to recognize hazards in order to mitigate them and protect ourselves from injury.

Take Ownership- Ownership is the most important part of the process. Once you recognize hazards or potential issues while on the job, own them. See through that they get properly corrected in a timely manner. It is easy to just walk past an issue and think that it is not your problem. In reality any hazard on the job is your problem. If someone else is hurt or there is property damage due to the hazard you recognized and walked past, it will have some sort of effect on you. Incidents affect a jobsite as a whole, and depending the severity, can have far reaching consequences for an entire company. There is also guilt you could feel due to an injury occurring to a coworker from a hazard you could have addressed. Taking ownership means more than just communicating the hazard to the other people in the work area. Stop work if necessary and get the right people involved to correctly address the hazard.

Summary

While these four steps are very basic, it is easy skip some of them and just go through the motions due to complacency or time restrictions when at work. We often complete many of the same work tasks in the same way every day. This makes it easy to fall into a trap of having blinders on to hazards that could lead to an injury. Use the S.O.R.T. tool to remind yourself to take the time to really evaluate your work area for hazards and to take ownership of them.
Spotter Safety

While spotting for heavy equipment operators may not seem like a dangerous task, it certainly is. Every year back over incidents between equipment and spotters result in fatalities. OSHA states that dump trucks followed by semi-trucks and ordinary pickups are responsible for the majority of back over incidents in the past 10 years on the job. Spotting for equipment has been proven to be an effective safeguard for preventing incidents between pedestrians and the equipment as well as preventing property loss incidents, but safe work practices need to be established to protect spotters as well.

Basic Safe Work Practices for Spotting:

- Never walk behind the equipment and spot at the same time. When spotting stand at the desired area where the equipment is going and flag the equipment back to you.
- Agree on hand signals prior to any spotting activities with equipment operators.
- As the operator, stop anytime you lose sight of the spotter.
- Review the work area for any additional hazards such as trip hazards or fixed objects that the equipment can strike. Remove any people, objects, or equipment prior to needing to back into an area to eliminate the possibility of a strike.

Other Considerations

When planning work, look at the task and determine if there is a way to eliminate backing or minimize it. If there are trucks in the work area that need to dump material, look to be able to pull through where they need to dump. If pulling through is not possible, pick a route that minimizes the need to back up.

Often times, personnel who are spotting for equipment may not have ever operated that specific piece or model of equipment. Work with operators to discuss and review the blind spots of the equipment onsite. Some of the large off-road dump trucks have more than a 60 foot blind spot in the rear. If the spotter or other personnel in the work area are not aware of the blind spots of the equipment, they may unknowingly walk into the line of fire.

Discussion points:

- Is there a task where we can eliminate the need for a spotter?
- What are some other safe work practices we can use when spotting or operating around a spotter?
Stopping Work

When there are hazards present or some other issue that interferes with being able to perform a work task safely then it is important to feel comfortable to stop the work until it is safe to continue. Many companies stress the importance of being able to stop work without punishment, but there are many employees who do not feel comfortable doing this for many reasons.

Reasons Why Individuals are Afraid to Stop Work

- Afraid of punishment from supervisors
- Want to avoid conflict with others
- Do not want to be seen as scared or a “snitch”
- Do not want to slow work down

It is easier said than done to stop work in the name of safety, but it needs to be communicated that it is encouraged and okay to do so. Even if the highest levels of management in a company stress the importance of being able to stop work, a single individual can make it hard for the employees on the work site to actually do so comfortably. Employees need to know different avenues of reporting safety hazards to the management in a company. If a certain manager or supervisor makes it uncomfortable for you to stop work or report a hazard, go to another supervisor or your safety officer to do so. You should be able to go to someone who will work to fix the problem as well as not disclose who reported the hazard in the first place if you feel that you could be punished for doing so. Outside of the company you have the right as an employee to report safety issues to OSHA without the fear of retaliation. You can do so confidentially.

Reasons to Stop Work

- To protect yourself and your fellow coworkers
- To protect property or equipment from damage or loss
- To protect the company’s bottom line and reputation

Situations Where Stopping Work is Necessary

- When there is an unaddressed hazard.
- When the correct personnel are not a part of the task. For example- a company policy states that a spotter is needed while working on an aerial lift and the spotter needs to leave the area. You need to stop work until the spotter returns.
- When you do not have the right tool or equipment for the job. Using tools not designed for the task can lead to an incident.
• When you do not understand the work task or procedures. Stop and get clarification for the task.
• When you do not have the correct knowledge or training to do a task safely.

Summary

These are just a few of the situations where stopping work is necessary. Individuals need to feel comfortable stopping work to address whatever the problem is to be able to complete the work safely and efficiently. Many times the fixes that will make a job safer are quick and easy. You have the power to make a difference and stop work when it is needed. Despite how uncomfortable some of these situations can be, if an incident occurs it is much more painful for everyone involved.

Discussion points:

- What are some situations that could come up in your work today where stopping work is necessary?

- Do you feel comfortable stopping work? Why or why not?

- Discuss a past incident and how stopping work could have prevented it.
Struck-by Incidents in Construction

With all of the moving equipment, flying debris, and falling objects on a construction site it can be a very dangerous place for an individual on the ground. It is important to understand the specific hazards of the work for that day as well as the job site overall as ground personnel who will be on the job site. Furthermore everyone needs to work together to eliminate or mitigate the hazards that result in struck-by incidents.

Struck-by Incidents

Struck-by incidents are one of the biggest risks to ground personnel on any construction site. These incidents were responsible for 8.1% of all fatalities in the construction industry in 2014. There are many struck-by hazards on every construction site that can severely injure or kill workers on any given day. Common struck-by hazards include moving equipment, falling objects, and flying debris.

Safeguards to Prevent Struck-by Incidents

- Eliminate as many struck-by hazards due to equipment as possible. For example, does a piece of equipment or vehicle need to be operating in an area where there are pedestrians? Can you eliminate unnecessary backing? Can the worker on the ground wait to complete the task they were assigned to do or complete it somewhere else away from moving equipment?
- Eliminate the potential for dropped objects. Remove materials or tools that are located on an elevated level when possible. If elimination is not possible then make sure there is proper toe boards located on any elevated surfaces to prevent objects from sliding off. Another option is to tie off tools and materials to ensure they do not fall to a lower level.
- Barricade work zones to prevent entry where equipment is operating or there is work overhead being completed. Substantial barricades such as fences will help prevent ground personnel from entering an area they could be injured.
- Barricade or separate any work tasks that create flying debris. For example, workers should not be exposed to grinding operations or operations that create excessive dust, like cutting concrete, if they are not the ones completing the task.

Summary

It is difficult to fully eliminate the hazards that result in struck-by incidents, but proper planning and work zone delineation can help to eliminate exposure to these risks. Evaluate your work tasks to see if there are any unnecessary risks to ground personnel due to the mentioned hazards above.
Discussion points:

-What are some of the struck-by hazards we face?

-How can we eliminate some of these hazards on the jobsite?
Surveying (Construction)

Surveying is a relatively repetitive and low hazard task on its own. However, surveyors on construction sites face many different hazards while completing their work. It is important to evaluate the work environment and eliminate as many hazards as possible prior to beginning surveying activities onsite.

Surveying on a Construction Site Hazards

There is a lot of activity going on at any construction site. Site wide operations cannot be shut down for surveying or any other single work tasks to be completed for the most part. Instead hazards need to be considered and safeguards put into place to ensure the task can be completed safely. Some hazards to consider:

- Struck-by or caught in between incidents. The major hazard for surveyors on a construction site is moving equipment.
- Dropped objects. Personnel working below higher work areas are put a risk for dropped object related injuries.
- Slips, trips, falls. Uneven ground and objects create a situation where a surveyor can be easily injured during their work.
- Hand injuries. Surveyors who utilize stakes have the hazard of injuries of hands or fingers while hammering in stakes.
- Eye injuries. Dust and flying debris create a major hazard for eye injuries when walking around a construction site.

Best Practices When Surveying

- When possible, have equipment stop when it is required to survey close to moving equipment. Plan out work tasks so they do not interfere with one another. For example, survey when operators are on lunch or break.
- Always communicate in morning meetings or tailgate meetings about the plans for surveying that day when other work tasks are being completed in the area. Communication allows for planning as well as awareness between work groups of other people entering a work area. Make contact with operators when entering a work area.
- Never walk under suspended loads or put yourself in the line of fire from higher work levels. Objects on higher work levels need to be secured and proper guardrail systems with toe boards need put into place to protect personnel below.
- To prevent slip, trip, fall injuries practice good housekeeping. Eliminate as many of these hazards as possible instead of just walking around them. For muddy work areas, have a
dozer or maintainer dress up the area instead of facing difficult working conditions when surveying.

- Eliminate dust by using water to suppress it. Avoid working downwind from moving equipment to avoid eye injuries. Wear proper safety glasses with side shields. Never rub your eye if you get dust in it. Notify a supervisor and rinse the eye with the proper eyewash solution.

Summary

While the actual task of surveying is not very hazardous on its own, the tasks going on at a construction site create many hazards for surveyors. It is important to give proper attention to these types of work tasks to avoid injuries. Always preplan work tasks, evaluate the work environment for additional hazards, and stop work when needed to adjust plans to make the work task safer.
Take “the Choice” Out of Safety

For a company to truly be successful in their safety efforts everyone has to make right choices to work safely. These choices include following safety rules, following the mitigation actions outlined in the job safety analysis for that day, abiding by standard operating procedures, and so on. There are some safeguards that are so effective in controlling hazards that they take the choice out of following rules to work safely. Everyone on a jobsite, especially management should strive to look at safeguards that take the choice out of working safely.

What is Meant By “Taking the Choice Out”

There are different levels of safeguards we can use to prevent an incident from occurring. Some safeguards are more effective than others and can eliminate the chance that a specific hazard causes an incident to occur. Other safeguards such as rules, safety procedures, and wearing PPE are less effective because individuals have more freedom to choose whether or not they obey these rules to work safely. More effective safeguards are the ones that take the personal choice out of the equation.

Effective Safeguards

Effective safeguards include elimination of hazards and engineering controls. Elimination of hazards is the single most effective thing you can do to prevent incidents and injuries from occurring. Elimination of hazards is achieved in different ways. Proper preplanning of a work task is an important step in eliminating hazards. By looking at a task that is going to be completed before work starts, management along with the field crew can make decisions to eliminate hazards by choosing safer means to do the task. For example, choosing to stockpile materials away from fixed objects such as expensive equipment or utility lines would eliminate the hazard of a struck-by incident when a front loader has to retrieve material from that stockpile.

An example of when an engineering control eliminates the choice to work safely would be choosing an efficient ventilation system to remove contaminants from a work area instead of relying on employees wearing their respirators. By eliminating the hazard through ventilation it does not leave the choice up to the worker to wear the proper respirator correctly when in that area.

Summary

Take the choice out of safety whenever possible. Whether you are management or a field worker we can all make decisions to make a work area safer for those around us. Dealing with hazards and leaving it up to choice opens the employees of a company at risk for injury.
Discussion point:

- What hazards are we dealing with when we could eliminate them?
Taking Ownership

Much of the time spent talking about safety on the job is focused on educating workers to be able to recognize or identify hazards on the job. Less time is often spent discussing how to correctly mitigate those hazards. Part of correctly mitigating a hazard in the workplace is taking ownership of it and seeing it through that it gets corrected.

Recognizing a Problem vs Taking Ownership

There is a huge difference in a worker who is able to recognize a hazard and a worker who recognizes hazard and owns it until it is corrected. You may have heard someone say after an incident occurs, “yeah I saw him doing that, I knew something was going to happen” or “I knew someone was going to trip over that broken concrete at some point”. These statements show that the person saying this recognized the hazard, but most likely stopped there. They identified it was a hazard, but they did not take ownership of the hazard and follow through on making sure it gets corrected.

Management Failure

There are situations where a hazard is reported by a worker, but not fixed by management. In these cases it is often a failure by management or the person above you who is responsible for taking your concern about a hazard and correcting it if needed. As the worker there are still options for you if this occurs. It may be a case of the person who is responsible to fix the problem just simply forgetting about it. As the worker on the ground near the hazard, remind them that it needs fixed. If it is a case of a supervisor not taking the concern of a hazard seriously, then go to a different supervisor or a higher level of management. Having the mindset of “I did my part” is not good enough when it leaves a hazard for others to be exposed to.

Summary

Safety in the workplace is everyone’s responsibility and injuries affect everyone in that workplace not just the person who gets hurt. When you recognize a hazard do not just keep it to yourself. Doing this may protect you, but it leaves everyone else in that area vulnerable to an injury or incident.

Discussion point:

-What is a hazard that people are likely to recognize in a workplace and think to themselves “it is not a big deal” or “someone else will take care of it”?
Taking Safety for Granted

The measures we take to work safely can become redundant or repetitive at times, especially on jobs that do not change much. The reason why it can become repetitive is because it is often the same hazards that lead to the majority of injuries. We need to appreciate the amount of time and money companies spend on safety in the United States. Not so long ago Americans faced horrible working conditions and a lot more risk when they went into work. Today there are many countries whose employees do not enjoy the same rights regarding workplace safety as we in the United States do. It is critical keep these facts in mind to not take workplace safety for granted.

Workplace Safety in the United States in the Early 1900s

There are many different statistics we can look at regarding the workplace in the early 1900s to demonstrate how dangerous it was to be a worker in this country back then. One eye opening statistic is that the Bureau of Labor Statistics states that there were about 23,000 industrial deaths in 1913 among a workforce of 38 million, equivalent to a rate of 61 deaths per 100,000 workers. In contrast, the most recent data on overall occupational fatalities show a rate of 3.3 deaths per 100,000 workers. The difference is staggering. You were almost 19 times more likely to die in the early 1900s working in an industrial setting than you are today, not to mention the unimaginable amount of serious workplace illnesses and injuries that occurred during this time. There are many stories of horrible tragedies that claimed hundreds of workers’ lives in single events from this time period.

Workplace Safety in Developing Countries Today

While workplace fatality rates in the United States are close to all-time lows today there are many countries that experience higher fatality rates and horrible working conditions. For example, many Chinese workplaces today look much like the ones found in America in the early 1920s. Workers are looked at as expendable by many employers and the government does not offer very much protection for the individual worker like we experience here in the U.S. One well-known news story was about how FoxConn, a company that assembled iPhones in China, had to install “suicide nets” around their building due to multiple employees jumping from the top of the factory and committing suicide. These workers often worked long hours completing monotonous tasks for a minimal amount of money per hour.

Summary

We need to take a step back as Americans, or anyone who is from a progressive developed country, and realize how lucky we are to have basic protections as employees. Furthermore companies spend a lot of money and time to go beyond just basic compliance to ensure

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employees are comfortable and safe while at work. Think about this safety talk alone, it was only five minutes or so, but multiply that time for each individual worker in this room and total it up for a year’s time. Safety does benefit the company’s bottom line as well, but workers enjoy more benefits from the amount of attention to workplace safety than the company does.
Taking Safety Home

Dozens of hours every year, if not more, are spent discussing safety in the workplace at many companies. Employees who work for companies that spend this amount of time discussing safety should do more with that knowledge than just use keep it to themselves and use it at work. The safety information you learn on the job should be taken home to your family.

Why You Should Take Safety Home

The most obvious reason you should take the safety information you learn at work home is to pass it on to your family. If your company spends the time to educate you about some safety concern that applies to home, you should also pass it on to your family. You do not know what you do not know. Educate your family so they can recognize hazards and protect themselves from harm.

Another reason you should apply the safety knowledge you gain at work when you are at home is to keep yourself healthy. Keeping yourself healthy allows you to continue to work and earn money for your family. Every person plays a role at work and even when someone gets injured off the job it hurts the company. Every company wants their workers to be safe off the job so they can return to work and fulfill their role in the workplace.

Safety at Home Self Check

There are similar safety concerns at almost every home. Below is a small basic checklist to gauge whether or not you are addressing some of the larger safety issues in your home.

- Are there working smoke alarms in the house? Are they in the proper locations?
- Are chemicals and other harmful substances locked up to protect small children and pets?
- Do you and other family members wear proper PPE when doing yard work such as weed trimming or while using a chainsaw?
- If you have a pool does it have a proper fence and locking gate?

If you answered “no” to a lot of these questions, then you need to ask yourself why are these safety concerns not addressed in my house? Have you educated your family members on these hazards? How would it affect you and your family if something happened to a young child in your home because a hazard was not addressed? Take safety in the home seriously and protect your loved ones.

Discussion point: Have you taken safety information you have learned here home? If so, do you have an example?
Task Planning

Today more than ever, demands at work are at an all-time high. Productivity is recognized and rewarded in the workplace. Working fast however does not always equal working productively and efficiently. When we go to do a work task it is very important to plan out the time and resources it might take beforehand. Poor planning and inefficiency in the work process creates many problems and affects our ability to work safely and productively.

Preplanning Work Tasks

When more than one work task needs to completed in a day and there is not adequate time or resources to complete the tasks, there is a breakdown in the workers’ day. It is important up front to know what time and resources are needed for a task. This planning should start at the management level and they should get input from any subject matter experts as well as the workers involved in the task. This process can be informal, but especially for complex tasks, there should be a written document outlining the steps of the task. After reviewing the steps of the task, the necessary training, personnel, equipment, permits (if needed), and time needed for the task can be determined. When all of this is determined up front and all of the necessary resources are made available for the work task ahead of time, everything can run efficiently. Having all the required resources also allows for workers to take the time to ensure the proper safeguards are in place during the task.

Adjusting Work Plans

While we can plan all we want, there will still be changes that we will have to account and adjust for. Things such as equipment breakdowns, employee absences, and weather are just a few common problems that could throw off the original plans for the task. For critical tasks especially, there should always be back up plans thought of in case of changes. When things come up and changes need to be made, the new plan has to be implemented thoughtfully. If new equipment or personnel have to come in on a work task, take the time to let everyone involved know of the changes. Look at the original plan again and see if any additional resources or time will be needed after the change.

Weather Considerations

Weather is one item that should always be planned for during every task. In new construction for example, there is a lot of grade work and excavations every day. If there is rain in the forecast for later in the day then the supervisors and operators should have a plan of where the run-off water will go and accumulate. Having a plan to adjust your work area before weather arrives could mean the difference between a few hours and a few days of downtime in a work
area. Not only will this planning and adjustment lead to production, it will also allow everyone in that work area to work safer after the rain event.

**Discussion point:**

- What other considerations should we take account for when planning for a work task?
The Ripple Effect of an Incident

When discussing injuries and the importance working safe we often discuss how an injury would affect an individual’s immediate family or loved ones. While this may be an effective method to provoking thought in an individual worker I want to discuss the not so immediate effects working unsafe can have. There is often a far reaching ripple effect of consequences from any incident that occurs, even if it does not result in injury.

The Ripple Effect

The ripple effect is a commonly used concept in today’s society. Merriam-Webster defines ripple effect as “a spreading, pervasive, and usually unintentional or influence.” In the field of environmental remediation, our projects are spread out across the country. You may never see or work with the other 90% of the company’s workforce. It is easy to fall into a state of mind that what occurs on your particular project mainly affects just those people and that project alone.

One day, while prepping for an audit, I was reminded how far my actions or decisions can actually reach. Our client had very strict standards for safety, which made for a safe job site, but it also put a lot of pressure on the management and the work crew. Out of frustration, I made a statement half-jokingly along the lines of “the worst thing they can do is fire us”. A woman who has been with my company almost as long as it has been around was quick to respond. She stated, “No, that is not the worst thing that can happen. The worst thing is that we could perform poorly and our company’s reputation could be damaged.” A light bulb went off right then. Our decisions, actions, performance, etc. affect more than just ourselves. Sure I could have been fired if the audit went terrible (which it went very well), but that is not the worst thing that could come of my decisions.

The worst thing is affecting the company on a larger scale in a negative fashion. These audits were a part of our score card that was in part used to bid other jobs with this client. If we did not perform well at my site, we hurt more than just ourselves on that site. We hurt the company.

Why You Should Focus on the Large Ripple

This idea of a larger ripple is something I try to pass on to the other employees on my sites. Even if they do not enjoy working for the company as much as I do, they should have some type of feeling of obligation to complete their best work for the other employees in the company. If someone is planning on quitting and decides they do not care anymore or are willing to take risks, they need to understand that there are hundreds of other employees and their families
depending on the paycheck that comes from the company. One simple action or decision that leads to a negative event can have far reaching long-term consequences.

As an employee, I want to argue that you have an obligation to the other employees in that company to do your best work. Notice I did not say an obligation to the company. While you can argue that one does indeed have an obligation to the company, it can be more easily brushed off than an obligation to the other employees in the company. It is easy to think the owner or high level of management who represents “the company” does not give a care about the individual worker thus making it easier to rationalize taking short-cuts or putting in little effort at work. In my opinion, it is harder to brush off the idea that an individual’s lack of effort or unsafe work behavior is hurting their fellow employees in the company.

**Summary**

What kind of ripple effect will you make? Is it pervasive in a good way? Let your work have a larger positive affect for your company. Challenge those around you to have a positive effect that reaches far past the immediate jobsite, office, or branch they work in.
Theft from a Construction Site

Theft is a major concern for all companies. Construction companies especially deal with unique challenges in protecting themselves from theft. According to the National Equipment Register, construction jobsite theft costs the industry up to $1 billion each year. It is important to consider the challenges of protecting a work site from theft and take steps to prevent it from occurring.

Best Practices to Prevent Theft from a Construction Site

There are many different and even high tech ways to prevent tools, equipment, or valuables from being stolen from a construction site. Depending what is onsite, the challenges to protect the site as a whole, and what geographical area the site is in will better determine what is needed to properly plan for theft prevention. To save time, we will discuss a few basic considerations to prevent theft from a worksite:

- Secure the perimeter around the site with fence and barbed wire.
- Do not leave tools or valuables near fence lines.
- Have laydown areas that equipment is parked in overnight with a simple camera system focused on that area of the work site.
- Lock valuables up in a secure building or Conex container.
- Do not leave valuables where they can be seen through a window. Seeing valuables could give a thief the green light to actually break in to retrieve the object and more.
- Do not let people outside the company know what valuables onsite. People are more likely to break into a site if they know there is certain valuable equipment, tools, or material on that site.
- Keep detailed records and pictures of all tools and equipment. If something is stolen it may be easier to prove that it belonged to the company if recovered.

Summary

There are many steps we can all take to ensure valuables, tools, materials, and equipment are not stolen. While much of the theft is done by individuals who break into a site after hours, it also occurs in house by employees. It is important to speak up if you think someone is stealing from the company. Theft hurts the company as a whole and can cut into benefits and improvements that could have been made if theft did not occur.

Discussion point:

-What are steps can we take to prevent theft from this jobsite?
Using Multiple Safeguards to Prevent a Single Type of Incident

We have all heard of the term “root cause” of an incident or injury. Root cause can be defined in many ways. One definition is, “The cause of a problem which, if adequately addressed, will prevent a recurrence of that problem.” When discussing a root cause of an injury using this definition, it seems that if you control the root cause then you will prevent the injury from happening again. However there are also contributing factors that lead to an incident and not just a single root cause. Because of this fact, there are multiple ways to prevent any one injury through various safeguards.

Root Cause and Contributing Factors

For an injury to occur there are usually multiple failures in the safeguards in place or that are supposed to be in place. The hierarchy of controls lists the most effective safeguards down to the least effective safeguards. Different levels of these safeguards can prevent any single type of incident or injury from occurring. The more safeguards that are put into place and used correctly the less chance there is of an injury occurring.

Real World Example

To break this down we will look at a real world example. One incident that can occur in many different industries is a vehicle or heavy equipment striking a pedestrian. Let us discuss a fatality of a laborer on a construction site who was struck by a front loader backing up. In our example the laborer was looking at his cell phone and walked into the roadway where a front loader operator was backing up. The operator did not look while backing nor did he have a spotter. Many people would state that the root cause is either the front operator not looking while backing or the laborer distracted by his cell phone. One of these could be the root cause or something else may be, but there is not enough information provided to determine this. We are going to use this example to discuss using multiple safeguards to prevent this incident.

Multiple Safeguards and Injury Prevention

The hierarchy of controls can vary depending on what source you look at but in this example we will look at preventing a back over incident by discussing elimination of hazards, engineering controls, administrative controls, and PPE/ individual behaviors.

Elimination- The best safeguard is one that eliminates the chance of the incident occurring at all. In our example management could pre plan the activity so that pedestrian activity is completely eliminated in an area where heavy equipment is operating thus preventing the chance of the incident happening altogether. Elimination of every single hazard is not always possible so we will look at the other safeguards.
Engineering controls- Engineering controls are some type of physical barrier or safeguard that protects workers in that area or during a certain task. In our example a physical barrier such as fence or wall would be an engineering control that could prevent a worker from walking into a work area where they could be struck by moving equipment.

Administrative controls- Administrative controls are controls implemented by management to prevent injuries and illnesses. These controls include, training, hazard recognition, JSAs, SOPs, policies, programs, etc. In our example there are many different administrative controls that could have prevented a back over incident. A good JSA discussing the hazards for the work that day is an example of an administrative control that could prevent a back over incident. Implementing a policy that states no backing is allowed unless there is a spotter present is another example. Training for both the operator and laborer on policies regarding the hazards of the work is also an example of an administrative control.

PPE/ Individual behaviors- Relying on PPE and individuals making the right choices is always the last line of defense and should never be relied on solely to prevent injury or an incident from occurring. A type of PPE that could help to prevent a back over incident is a reflective vest. An example of an individual behavior that could prevent a back over incident is the employees choosing to follow safety rules or policies that are in place.

Summary

The goal of an incident investigation is to find the root cause to try to correct it and prevent a similar incident from occurring again. Incident investigations are reactive in nature. It is an action taken after an incident has already occurred. There are many proactive safeguards that could be used to prevent a single incident from occurring just like in our example. If any one of the mentioned safeguards were in place and functioning the fatality would not have occurred. Always start with eliminating the hazard completely or choosing an engineering control to protect employees before only relying on an administrative control, PPE, or individual behaviors.
Vehicle Inspections

The roads can be an extremely dangerous place. According to the National Highway Traffic Safety Administration, there were an estimated 6.3 million police-reported car accidents in the United States in 2015. While many accidents are caused by distracted driving and driving under the influence, mechanical issues also lead to accidents. Vehicle inspections and preventative maintenance are effective ways to prevent mechanical issue-related crashes.

Mechanical Issue-Related Crashes

Only a few types of mechanical issues represented the majority of accidents that were caused by some type of failure in a vehicle. The National Highway Transportation Safety Administration stated in a 2008 report that tire/wheel degradation or failure represented 43% of all mechanical issues resulting in crashes. Brake degradation or failure was second at 21% and steering/suspension/transmission failure represented 10.5% of mechanical issues that lead to accidents. It is important to inspect your vehicle for these common issues.

Vehicle Inspections

Most states require an annual in-depth inspection of any vehicle registered in that state to help avoid these types of problems creating a hazard on the road. It is important to also complete more frequent inspections of your vehicle prior to use. A simple walk around of your car or truck prior to operation can avoid an accident. A few things to look for during a quick inspection:

- Look for low tire pressure. This could signal that you need air in the tire or a patch depending on the problem.
- Look for any bubbles in your tire. If there is a bubble in your tire this means you have a break in a belt in the tire and it is now compromised. It is recommended that you use your spare or get it replaced immediately before driving the vehicle again because the tire could give way at any time.
- Start the car and listen for any odd noises.
- Make sure there are no objects that you could strike pulling out from where you are parked.
- Pull forward and test the brakes before starting your trip.

Preventative Maintenance

There is a lot of maintenance vehicles require to ensure safe and efficient operation. Changing tires before they get too worn is very important to be able to operate a vehicle safely. Other common issues to address include changing the oil, replacing belts, replacing fluids, and
replacing windshield wipers just to name a few. Read your vehicle’s owner manual to get familiar with what preventative maintenance needs taken care of and when.

Summary

While the majority of the time you will never any of the issues mentioned above, the one time you do it could result in a serious accident. Take mechanical issues seriously and when you find one during an inspection get it fixed by a professional to ensure the vehicle is safe to operate.
Verbal Communication

Every single day when we are around other people, we are communicating something to them regardless if we actually speak or not. The way we look at people, what we wear, our facial expressions, and our body language are just a few ways we communicate with others outside of spoken word. It is important to be aware of what message we are sending to those around us and how it is affecting them or the work you are completing.

Non Verbal and Verbal Communication

Most people would guess that verbal communication makes up the majority of communication. Studies show however that the majority of communication is actually nonverbal. This nonverbal communication is linked to actual words we say. The Non Verbal Group states, “Dr. Albert Mehrabian, author of Silent Messages, conducted several studies on nonverbal communication. He found that 7% of any message is conveyed through words, 38% through certain vocal elements, and 55% through nonverbal elements (facial expressions, gestures, posture, etc).” While this statement makes the claim that we overwhelmingly communicate non verbally, much of the communication is delivered through how we talk not so much as to what we say. When is the last time you have given thought to the link between how you communicate and the effect it has on the people around you?

Why We Need to Be Aware of How We Communicate

Everyone has worked with someone who is consistently negative and is hard to approach about anything. Often times, most people do not want to approach these individuals or communicate with them due to how they communicate verbally and nonverbally. When an individual snaps back or approaches communication with others in a negative manner it is difficult to get any message across. Going back to the statistic about how communication is more about how we say something and less about what we actually say, everyone should be aware of how they are coming across to others.

When we pay no mind to how we communicate with each other, messages are lost or not conveyed at all. At work, communication is vital is being able to successfully work safely and efficiently. When everyone feels comfortable being able to approach each other it creates a healthier working environment. Effective and open communication creates a working environment that can lead to individuals feeling comfortable stopping work when needed, more hazards addressed, higher morale, less stress, and better cohesiveness between work groups.
Summary

Think about how you come off to others you are working with. Almost any problems in the workplace can be solved with effective and respectful conversations. Try to adjust the way you communicate verbally and nonverbally with others at work to enhance your working environment, not hurt it.
Weakest Link

Have you ever heard of the saying “you are only as strong as your weakest link”? The weakest link on a team can be a variety of people on any given day. Traditionally, the weakest link is usually considered the lazy guy or the new guy. No matter who is the weakest link on that day, they can be a huge liability for your entire team to work safely.

A new guy may not always be a liability to the safety culture of a company, but a lazy worker is almost certainly is. Lazy workers are workers who take short cuts and do not want to do the job correctly for the sake of making the task easier on themselves. Taking shortcuts often leads to safety rules and procedures being broken. When rules and procedures are broken, the entire workforce on that job is at risk. While the shortcuts may be “small” in nature, even the smallest of injuries or incidents can have a large impact on the company as a whole. Many industries use a company’s total recordable incident rate into account when considering bids for work. Small injuries due from taking “small shortcuts” can lead to big effects in the company’s ability keep current work and to get future work. This affects the entire workforce, not just the individual taking shortcuts.

Even the most experienced or safest worker can be the weakest link on the jobsite on any given day. We all have our bad days where our minds and attention are not completely focused on the job. Many people do not know what a coworker is dealing with at home and how it is affecting their work. It is important as individuals to take ourselves out of work when it affects our ability to do our job safely and effectively. Look out for one another and take the time to check on a coworker who seems off of their game.

Summary

Everyone has to work together to create a safe work culture where injuries and incidents are prevented every single day. Everyone from the top manager to the lowest guy on the totem pole needs to believe in working safely and working together to go home healthy to their families every day. Working as a team means more than just a unified belief that work safely is important. To achieve excellence in safety, a strong team is needed in every aspect of the work being completed.

Discussion points: What are some things in our lives that can distract us from our work?

-Talk about examples of past incidents that may have seemed small but had huge consequences for a company. If you do not have any examples, ask everyone in the meeting to think about if there were a few injuries onsite and how that would affect the site and the company as a whole.
What We Represent

It is obvious that we represent ourselves in the work that we do. However, we also all represent many other things bigger than ourselves in how we choose to carry ourselves. Many people may not connect the dots and realize what they represent outside of themselves in their lives and how they choose to go about things. We will discuss the connection between us, the work we do, and the world around us.

Your Work and Your Reputation

The most obvious connection between your work and you is your reputation to those around you. Our work, attitude, decision making, communication with others, etc. is always being evaluated by our peers- good or bad. It does not even have to be evaluated on purpose by the people around us. Our coworkers form opinions about us whether they recognize it or not. Often times we only fully realize our opinion about someone once another person asks us about the person or you just happen to really think about him or her.

A study posted by LinkedIn, the world’s largest professional networking site, estimates that over 80% of jobs are filled through networking. So at the most basic selfish level, your work today can have an impact on the job you have in ten years. Think about it, how many times have you got a job offer from a friend or someone puts in a good word for you at their company due to working with that individual before? Have you missed opportunities or promotions due to performing less than optimal work? Has your reputation helped or hurt your chances of getting a job?

Your Work and the Larger Reflection

Outside of how your work affects your own reputation, it also majorly reflects on other aspects of your life. We all represent certain groups, types of people, churches, organizations, schools, unions, training centers, geographic areas etc. We should feel an obligation to be a positive reflection of the other areas in our lives. For example, your company consistently hires out of a certain school you trained at. One year though, a few of the new hires out of that school caused issues in the workplace and quit or were fired. Because of these few individuals the company begins to look elsewhere during the hiring process.

Not only did those individuals' work negatively affect them, but now the company that used to hire multiple graduates from that program each year is completely disregarding anyone out of that school. It is an unfortunate reality that individuals can have major negative effects on an entire organization, but it should also serve to drive you to complete your best work outside of self-serving reasons.
Summary

How will your work today affect you and your reputation? More importantly, how will your work affect your company, your school, or your specific union? Realize the association people make between individuals and the larger groups they come from. Be a safe and efficient worker that not only creates a respectable reputation for yourself, but also the other things you represent.
Wildlife in the Workplace

There are many different types of hazards wildlife in a work area can create. From ticks to deer and every kind of insect or animal in between, each can pose some type hazard to you at work. It is important to recognize the dangers wildlife can create in the workplace.

Dangers of Wildlife Statistics

There are a few common types of wildlife that are a major source of different injuries or illnesses in the United States. A few of them include ticks, mosquitoes, stinging insects, snakes, and deer. Here are some interesting facts on these common types of wildlife:

- The Insurance Information Institute reports that over 1.6 million deer-vehicle collisions occur each year and these accidents cause vehicle damage, injuries, and even fatalities at a cost in the neighborhood of $4.6 billion.
- Over 300,000 people are diagnosed with Lyme disease each year from tick bites in the United States according to the CDC.
- According to UF Wildlife, approximately 7,000 to 8,000 individuals are bitten by poisonous snakes in the U.S. each year.
- According to NIOSH, thousands of people are stung by insects each year, and as many as 90–100 people in the United States die as a result of allergic reactions.
- Mosquitoes are the deadliest creature worldwide. They kill around 725,000 people a year according to Bill Gate’s website.

While these are some high level statistics on major hazards and illnesses these creatures are responsible for, there are many other hazards to be considered for all wildlife.

Other Wildlife Hazards

Outside of poisonous or disease-carrying insects there can be other hazards wildlife in the workplace poses. One major hazard is the distractions animals or insects can create. Whether it is a huge majestic elk in your construction area or the buzzing fly that keeps landing on your face in the cab of your crane they both serve as a distraction from the task at hand. Eliminating distractions is an important part of creating a safe work environment and when there is certain wildlife in your work area this can create problems. Another hazard is being startled or surprised by wildlife. For example, you are cleaning up scrap materials from your work area. You begin to move the material and find a six foot long black snake. This catches you by surprise and when you jump back you strike your head off of a pipe receiving a laceration that requires stitches.
Summary

It is important to not only consider the disease carrying insects or the predators that could be around your work area, but all types of wildlife. There are many unique hazards they can each create. Find ways to mitigate the issues that these creatures can create for you at work.
Wind Dangers (Construction Industry)

Weather plays a huge role in our ability to work safely when working outdoors. While rain, snow, ice, and hot temperatures are often discussed, less focus is given to the hazards wind can create for workers. It is important to realize the different hazards high winds can pose and what can be done to work safely in these conditions.

Hazards Created by the Wind

The exact scope of work will determine what hazards high winds can create on a worksite. Some hazards created by high winds that are universal for many construction jobs are:

- Strains/sprains due to wind forcefully pulling doors from operator’s hands.
- Struck-by incidents due to objects being blown around.
- Slips, trips, falls due to workers reacting to a falling hardhat or object due to wind blowing these items from them.
- Eye injuries due to small particles of flying debris and dust.
- Dropped loads while completing lifts with wind present.
- Objects falling from elevated surfaces.
- Dump truck tip-over.

Best Practices to Eliminate Hazards and Injuries Related to Wind

- Eliminate work altogether in excessively windy conditions.
- Park trucks and equipment where the wind is blowing against the opposite side that the operator exits and enters.
- Do not reach or react to dropping an object or losing a hardhat to the wind. This can be very dangerous especially when you are on an elevated surface.
- Do not attempt to conduct lifting operations during high wind events. Many companies will use anemometer to monitor wind speeds and have a certain wind speed that constitutes a stoppage of lifting activities.
- Never stand in the line of fire—whether that is below a lifted load, next to a truck dumping material, or downwind from blowing dust.
- Wear at minimum safety glasses, but also consider going to a goggle if conditions warrant their use.

Summary

Preplanning of tasks is critical to ensure a solid start to working safely on a construction site. Weather is a major factor in what tasks can or cannot be done on a particular day. When high
winds are going to be present, plan work accordingly. Avoid certain tasks during high wind events as well as implement extra safeguards to ensure safety during the normal job tasks.

**Discussion point:** What other hazards do high winds pose for us on our worksite?
Winter Weather Driving

The roads are a dangerous place on even the nicest day, but in the winter the dangers of driving increase dramatically. According to the Department of Transportation, winter weather conditions are responsible for over 192,000 injuries and 2,200 deaths each year. Outside injury and loss of life, winter weather conditions are responsible for millions of dollars in property damage incidents.

Winter Weather Overview

The majority of the United States and its population are located in an area that receives snow or ice during the winter months. While most of the population has experienced driving in snowy or icy conditions, many individuals do not know how to safely drive in winter weather conditions. The hazards created by winter weather make it difficult for even the most experienced drivers to operate a vehicle safely.

Tips for Avoiding a Winter Weather-Related Accident

- Monitor weather for any incoming snow storms or icy conditions and plan your travel around those conditions. Do not put yourself in a situation where you are stuck on a roadside.
- Do not drive in wintery conditions if possible. Eliminating driving eliminates your chances of being in an accident.
- Be a defensive driver. Stay clear of other drivers and maintain a safe distance in case you need to brake or turn to avoid an accident.
- Slow down. Winter weather conditions necessitate having to reduce your speed. Reducing your speed will give you more time to react as well as help to avoid losing control of your vehicle.

Summary

The best way to avoid an accident during the winter months is to avoid driving in dangerous conditions. If you absolutely have to drive in bad weather conditions travel main roads that have already been plowed and salted. Notify your supervisor if necessary to alert him or her you will be late for work due to road conditions. Take your time getting to your destination.

Discussion point:

-Has anyone experienced a car accident due to winter weather conditions?
Work Area Best Practices

Often times much of our focus is given to the hazards of a work task, but less focus is given to the hazards poor work area conditions create. Work areas that are chaotic and that have poor organization can lead to injuries and property damage incidents. It is important to consider what improvements we can make to our work areas to create a safe work environment.

Hazards Created by Chaotic Work Areas

- Struck-by incidents. Work areas that do not have any designated paths for personnel walking through or areas blocked off for specific work tasks such as grinding, create struck-by hazards can be particularly dangerous. Flying debris, lifting loads, and moving objects can all create struck-by hazards for anyone in the area.
- Slips, trips, and falls. Objects on the ground due to poor organization or housekeeping create trip hazards for any walking through that area. Slippery surfaces due to moisture or other liquids such as oil can cause a slip or a fall. Uneven surfaces, steps, or unexpected drop-offs are also a common trip hazards in poorly designed work areas.
- Caught in or between incidents. Work areas that place people near moving parts or equipment is also a huge concern. Moving equipment such as belts or fans can grab a hold of a person’s clothing or hair pulling them into the moving parts.

Best Practices for Work Area Setup

- Delineate walking paths from actual work areas. Consider when physical barriers such as a fence or wall are needed to protect people from a hazardous work process. Consider color coding for work areas or the facility as a whole.
- Organize all tools, equipment, materials, etc. in an area. Everything should have its own place that does not pose a hazard to anyone in that area. Housekeeping is one of the most basic safe work practices there is.
- Always guard moving parts and equipment even when they are not in the immediate planned walking path. If people can fit into an area and the moving parts are not physically blocked off there is a chance of a caught in or between injury.
- Keep walking and working surfaces kept up and safe. Mark any elevation changes with bright fluorescent paint. Patch any holes or major cracks to prevent trip hazards. Always strive to keep dry clean floors. Consider applying some type of grit or material that improves traction in areas where moisture can occur.

Summary

The above hazards and best practices are just a few of the many that are related to how a work area is setup and maintained. What hazards are we not addressing in our work areas? What
improvements can we make today and in the future to create a safer workplace? What other hazards and best practices are out there?
Workplace Inspections

Workplace inspections are a basic necessity of any safety program. These inspections should be done prior to the start of work as well as periodically throughout the shift and at the end of the work task. Workplace inspections serve the purpose of identifying any hazards in a work area. After hazards are identified, they need to be corrected before work proceeds or continues. There can always be additional hazards present in any work area that were not planned for.

Hazards in the Work Area

Objects, equipment, people, or even animals find their way into work areas disrupting the work and creating additional hazards. Elimination of hazards is the most effective way to avoid injuries and property damage incidents. It is important to remove any unnecessary people, items, or equipment prior to the start of a work task.

By removing unnecessary personnel from a work area there are less people that have the chance to interfere with the work or be in the line of fire if something were to go wrong. Objects that are not needed in the area create trip hazards or can be struck by moving equipment and should be moved as well. Biological hazards such as insects or wildlife in work areas can pose many hazards to workers. Insects such as ticks or spiders can carry disease or poison that can affect an individual for years. Insects and wildlife can also distract employees from their work which could cause an injury.

Inspection Focuses

There are many other hazards that can affect a work area. Some of the common items you should look for during a work place inspection include: fire hazards, faulty equipment, broken tools, housekeeping issues, missing equipment guards, electrical cord and outlet problems, sharp objects, and missing labels. These are just a few examples- think of hazards unique to your work tasks.

Summary

There can be a variety of issues in any single work area. It is important to take the time to thoroughly check your work area for hazards and take the steps to mitigate them. Eliminate as many hazards as you can before relying on a less efficient control to protect yourself such as PPE.

Discussion points:

- What are items you look for during your workplace inspections?
-What do you do if you find a problem in your work area during an inspection?

-What is a hazard you discovered while conducting a workplace inspection?
Workplace Violence

Workplace violence is any threat, disruptive behaviors, intimidation, physical aggression, or act of violence in the workplace including homicide. Homicide in the workplace is currently the fourth leading cause of death on the job. In 2014 alone, there were 403 deaths on the job due to homicide. According to OSHA, over 2 million people report being victims of workplace violence every year.

Contributing Factors for Workplace Violence

Different factors contribute to whether someone may experience workplace violence. People who work where money is exchanged are at a higher risk factor for workplace violence. Other career fields such as EMS, police officers, healthcare workers, customer service representatives, and delivery drivers are more likely to experience violence while on the job. Factors such as time of day worked, geographical area of work, working alone or in small groups, also has impact on whether someone is more likely to experience workplace violence.

Employer Responsibility

Employers are ultimately responsible for keeping their employees safe. A zero tolerance policy is one of the best preventable measures an employer can take, especially for workplace violence between employees. Any threat or aggression needs to be immediately reported and addressed. Any concern from employees or a customer needs to be taken seriously and corrected immediately. Depending on the type of work being done other controls can be implemented by the employer to keep employees safe.

Summary

Individuals need to be diligent in protecting themselves as well. Report any suspicious activities whether it is the public or another employee when dealing with situations that can lead to workplace violence. When faced with workplace violence dealing with another coworker, do not become confrontational with them. Leave the area when you can do so safely and report the situation immediately to a supervisor. If your immediate supervisor does not take the report seriously, go to a higher level of supervision to correct the issue. Workplace violence almost never comes out of nowhere and when smaller issues are reported and addressed it keeps the entire workplace safer as well as yourself.